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<110> Casman, Stacie J
Edinger, Shlomit R
Ellerman, Karen
Smithson, Glennnda
Kekuda, Ramesh
Padigaru, Muralidhara

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Tyr Thr Thr Ile Met Cys Gly Asn Ala Cys Val Gly Ile Met Ala Val	
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Thr Tyr Val Val Thr Val Leu Gly Asn Gln Leu Ile Val Val Thr Ile
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Ile Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Cys
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Leu Ser Phe Ile Asp Ala Ala Tyr Phe Thr Val Ile Ser Pro Lys Leu
65 70 75

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Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Thr
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 Thr Val Ile Thr Pro Lys Leu Asn Pro Leu Ile Tyr Thr Phe Arg Asn
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Cys Phe Ser Gln Ala Tyr Phe Ile His Thr Leu Ser Val Met Glu Ser	
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Thr Leu Asn Arg Leu Tyr Pro Val Val Leu Phe Ala Met Val Leu	
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Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val Val	
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Pro	Phe	Ile	Tyr	Ser	Ile	Lys	Thr	Lys	Gln	Ile	Gln	Ser	Gly	Ile	Leu	
			290						295					300		

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Cys	Leu	His	Gln	Asp	Val	Ile	Lys	Leu	Ala	Cys	Ala	Asp	Ile	Thr	Leu	
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Asn Arg Leu Tyr Pro Val Val Val Leu Phe Ala Met Val Leu Leu Asp
 195 200 205
 Phe Leu Ile Ile Phe Phe Ser Tyr Ile Leu Ile Leu Lys Thr Val Met
 210 215 220
 Gly Ile Gly Ser Gly Gly Glu Arg Ala Lys Ala Leu Asn Thr Cys Val
 225 230 235 240
 Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val Val Cys Leu
 245 250 255
 Thr Phe Ile His Arg Phe Gly Lys His Val Pro His Val Val His Ile
 260 265 270
 Thr Met Arg Tyr Ile His Phe Leu Phe Pro Pro Phe Met Asn Pro Phe
 275 280 285
 Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Ser Gly Ile Leu Arg Leu
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 Phe Ser Leu Pro His Ser Arg Ala
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 <212> DNA
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 Ser Ala Ser Thr Phe Gln Leu Thr Gly Phe Pro Gly Met Glu Lys Ala
 1 5 10 15
 cat cac tgg ata ttc atc cca tta ttg gca gcc tac atc tcc ata ctt 96
 His His Trp Ile Phe Ile Pro Leu Leu Ala Ala Tyr Ile Ser Ile Leu
 20 25 30
 ctt ggc agt ggc act ctt ctc ttt ctc atc agg aat gat cat aac ctc 144
 Leu Gly Ser Gly Thr Leu Leu Phe Leu Ile Arg Asn Asp His Asn Leu
 35 40 45
 cat gag ccc atg tac tat ttc tta gct atg ttg gca gct aca gac ctc 192
 His Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu Ala Ala Thr Asp Leu
 50 55 60
 gga gtg aca ttg acc aca atg ccc aca gtg cta ggt gtt ctg tgg tta 240
 Gly Val Thr Leu Thr Thr Met Pro Thr Val Leu Gly Val Leu Trp Leu
 65 70 75 80
 gat cac agg gag act ggc cat gga gcc tgc ttc tct cag gcc tat ttt 288
 Asp His Arg Glu Thr Gly His Gly Ala Cys Phe Ser Gln Ala Tyr Phe

85	90	95	
atc cat act ctt tct gtc atg gag tca ggt gtc ttg ctt gcc atg gct Ile His Thr Leu Ser Val Met Glu Ser Gly Val Leu Leu Ala Met Ala 100 105 110			336
tat gac tgt ttc att gcc atc cac aac ccc tta aga tat atc tct atc Tyr Asp Cys Phe Ile Ala Ile His Asn Pro Leu Arg Tyr Ile Ser Ile 115 120 125			384
ctg acc aac acc cag gta atg aag att ggt gtg ggg gta ttg aca agg Leu Thr Asn Thr Gln Val Met Lys Ile Gly Val Gly Val Leu Thr Arg 130 135 140			432
gct ggt ctg tcc att atg cca ata gtt gtt cgc cta cac tgg ttt ccc Ala Gly Leu Ser Ile Met Pro Ile Val Val Arg Leu His Trp Phe Pro 145 150 155 160			480
tac tgt cga gcc cat gta ttc tcc cat gct ttc tgt cta cac caa gat Tyr Cys Arg Ala His Val Phe Ser His Ala Phe Cys Leu His Gln Asp 165 170 175			528
gtc atc aag cta gcc tgt gct gac atc acc ctc aac cgt ctc tat cca Val Ile Lys Leu Ala Cys Ala Asp Ile Thr Leu Asn Arg Leu Tyr Pro 180 185 190			576
gtt gtg gtt tta ttt gca atg gtc ttg ttg gac ttt ctc atc atc ttt Val Val Val Leu Phe Ala Met Val Leu Leu Asp Phe Leu Ile Ile Phe 195 200 205			624
ttc tcc tac att ttg att ctc aag act gtc atg ggc att ggt tct gga Phe Ser Tyr Ile Leu Ile Leu Lys Thr Val Met Gly Ile Gly Ser Gly 210 215 220			672
gga gaa agg gcc aag gcc ctc aac aca tgt gtc tct cat atc tgc tgc Gly Glu Arg Ala Lys Ala Leu Asn Thr Cys Val Ser His Ile Cys Cys 225 230 235 240			720
atc ctg gtc ttc tat gtc act gta gct tgt ctg aca ttt att cat agg Ile Leu Val Phe Tyr Val Thr Val Ala Cys Leu Thr Phe Ile His Arg 245 250 255			768
ttt gga aag cat gtt cct cat gtc gtt cac atc aca atg aga tac atc Phe Gly Lys His Val Pro His Val Val His Ile Thr Met Arg Tyr Ile 260 265 270			816
cac ttc ctt ttc cca cct ttt atg aac cca ttt atc tat agc att aaa His Phe Leu Phe Pro Pro Phe Met Asn Pro Phe Ile Tyr Ser Ile Lys 275 280 285			864
act aag cag att cag agt ggc ata ctt cgc tta ttc tct ctg cct cac Thr Lys Gln Ile Gln Ser Gly Ile Leu Arg Leu Phe Ser Leu Pro His 290 295 300			912
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<400> 10

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His	His	Trp	Ile	Phe	Ile	Pro	Leu	Leu	Ala	Ala	Tyr	Ile	Ser	Ile	Leu
			20					25					30		
Leu	Gly	Ser	Gly	Thr	Leu	Leu	Phe	Leu	Ile	Arg	Asn	Asp	His	Asn	Leu
		35					40					45			
His	Glu	Pro	Met	Tyr	Tyr	Phe	Leu	Ala	Met	Leu	Ala	Ala	Thr	Asp	Leu
	50					55					60				
Gly	Val	Thr	Leu	Thr	Thr	Met	Pro	Thr	Val	Leu	Gly	Val	Leu	Trp	Leu
65					70					75					80
Asp	His	Arg	Glu	Thr	Gly	His	Gly	Ala	Cys	Phe	Ser	Gln	Ala	Tyr	Phe
				85					90					95	
Ile	His	Thr	Leu	Ser	Val	Met	Glu	Ser	Gly	Val	Leu	Leu	Ala	Met	Ala
			100					105					110		
Tyr	Asp	Cys	Phe	Ile	Ala	Ile	His	Asn	Pro	Leu	Arg	Tyr	Ile	Ser	Ile
		115					120					125			
Leu	Thr	Asn	Thr	Gln	Val	Met	Lys	Ile	Gly	Val	Gly	Val	Leu	Thr	Arg
	130					135					140				
Ala	Gly	Leu	Ser	Ile	Met	Pro	Ile	Val	Val	Arg	Leu	His	Trp	Phe	Pro
145					150					155					160
Tyr	Cys	Arg	Ala	His	Val	Phe	Ser	His	Ala	Phe	Cys	Leu	His	Gln	Asp
				165					170					175	
Val	Ile	Lys	Leu	Ala	Cys	Ala	Asp	Ile	Thr	Leu	Asn	Arg	Leu	Tyr	Pro
			180					185					190		
Val	Val	Val	Leu	Phe	Ala	Met	Val	Leu	Leu	Asp	Phe	Leu	Ile	Ile	Phe
		195					200					205			
Phe	Ser	Tyr	Ile	Leu	Ile	Leu	Lys	Thr	Val	Met	Gly	Ile	Gly	Ser	Gly
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Gly	Glu	Arg	Ala	Lys	Ala	Leu	Asn	Thr	Cys	Val	Ser	His	Ile	Cys	Cys
225					230					235				240	
Ile	Leu	Val	Phe	Tyr	Val	Thr	Val	Ala	Cys	Leu	Thr	Phe	Ile	His	Arg
			245					250					255		
Phe	Gly	Lys	His	Val	Pro	His	Val	Val	His	Ile	Thr	Met	Arg	Tyr	Ile
			260					265					270		

His Phe Leu Phe Pro Pro Phe Met Asn Pro Phe Ile Tyr Ser Ile Lys
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Thr Lys Gln Ile Gln Ser Gly Ile Leu Arg Leu Phe Ser Leu Pro His
 290 295 300

Ser Arg Ala
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<220>
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 <222> (2)..(937)

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 ggc ttg gag gaa gct cat cac tgg att tcc gta ttt ttc ttg ttc atg 97
 Gly Leu Glu Glu Ala His His Trp Ile Ser Val Phe Phe Leu Phe Met
 20 25 30
 tat ata tcc atc ctt ttt ggc aat ggc acc ctc ctt ctt ctc att aag 145
 Tyr Ile Ser Ile Leu Phe Gly Asn Gly Thr Leu Leu Leu Leu Ile Lys
 35 40 45
 gaa gat cac aat ctt cat gag ccc atg tac ttc ttt ctg gcc atg ctg 193
 Glu Asp His Asn Leu His Glu Pro Met Tyr Phe Phe Leu Ala Met Leu
 50 55 60
 gct gcc aca gac ctg ggg ctg gcc ctg acc aca atg ccc acg gtg ctg 241
 Ala Ala Thr Asp Leu Gly Leu Ala Leu Thr Thr Met Pro Thr Val Leu
 65 70 75 80
 gga gtc ctc tgg ctg gat cac agg gag att gga agt ggc gcc tgc ttt 289
 Gly Val Leu Trp Leu Asp His Arg Glu Ile Gly Ser Ala Ala Cys Phe
 85 90 95
 tcc cag gcc tac ttt ata cac tca ctt tcc ttt ctc gag tct ggc att 337
 Ser Gln Ala Tyr Phe Ile His Ser Leu Ser Phe Leu Glu Ser Gly Ile
 100 105 110
 ctg ctt gcc atg gcc tat gac cgt ttt att gcc atc tgc aac cct ctt 385
 Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu
 115 120 125
 aga tat acc tct gta ctt act aat act cga gta gtg aag att ggg ctg 433
 Arg Tyr Thr Ser Val Leu Thr Asn Thr Arg Val Val Lys Ile Gly Leu
 130 135 140
 gga gtt ctg atg agg gga ttt gta tcc gtt gtt ccc cca atc agg ccc 481

Gly	Val	Leu	Met	Arg	Gly	Phe	Val	Ser	Val	Val	Pro	Pro	Ile	Arg	Pro		
145					150					155					160		
ctc	tat	ttt	ttt	ctg	tat	tgt	cac	tcc	cat	gtt	ctt	tca	cat	gca	ttc	529	
Leu	Tyr	Phe	Phe	Leu	Tyr	Cys	His	Ser	His	Val	Leu	Ser	His	Ala	Phe		
				165				170						175			
tgc	ctt	cac	cag	gat	gtc	att	aaa	ctc	gcc	tgt	gct	gat	acc	acc	ttc	577	
Cys	Leu	His	Gln	Asp	Val	Ile	Lys	Leu	Ala	Cys	Ala	Asp	Thr	Thr	Phe		
			180					185					190				
aac	cga	ctg	tac	cca	gct	gtg	ctt	gta	gtc	ttt	ata	ttt	gtg	ctg	gat	625	
Asn	Arg	Leu	Tyr	Pro	Ala	Val	Leu	Val	Val	Phe	Ile	Phe	Val	Leu	Asp		
		195					200					205					
tat	ctg	att	atc	ttc	atc	tcc	tat	gtg	ttg	ata	ctc	aag	act	gtc	ctg	673	
Tyr	Leu	Ile	Ile	Phe	Ile	Ser	Tyr	Val	Leu	Ile	Leu	Lys	Thr	Val	Leu		
	210					215					220						
agc	att	gcc	tcc	aga	gag	gag	agg	gcc	aag	gct	ctc	att	acc	tgt	gtc	721	
Ser	Ile	Ala	Ser	Arg	Glu	Glu	Arg	Ala	Lys	Ala	Leu	Ile	Thr	Cys	Val		
225					230				235					240			
tcc	cat	atc	tgc	tgt	gtc	ctg	gtt	ttt	tat	gtc	aca	gtg	att	gga	ttg	769	
Ser	His	Ile	Cys	Cys	Val	Leu	Val	Phe	Tyr	Val	Thr	Val	Ile	Gly	Leu		
			245					250						255			
tct	ctg	att	cat	cgt	ttt	gga	aag	cag	gtt	cca	cat	att	gtt	cac	ctc	817	
Ser	Leu	Ile	His	Arg	Phe	Gly	Lys	Gln	Val	Pro	His	Ile	Val	His	Leu		
			260				265						270				
att	atg	agc	tat	gcc	tat	ttt	ctg	ttc	cct	cca	cta	atg	aat	cct	ata	865	
Ile	Met	Ser	Tyr	Ala	Tyr	Phe	Leu	Phe	Pro	Pro	Leu	Met	Asn	Pro	Ile		
		275					280					285					
aca	tat	agt	gtc	aag	acc	aag	cag	att	cag	aat	gcc	att	ctt	cac	ctt	913	
Thr	Tyr	Ser	Val	Lys	Thr	Lys	Gln	Ile	Gln	Asn	Ala	Ile	Leu	His	Leu		
	290					295				300							
ttt	act	acc	cat	aga	att	gga	acc	tgatctccaa	tcatacaca							955	
Phe	Thr	Thr	His	Arg	Ile	Gly	Thr										
305					310												

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 <213> Homo sapiens

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 Tyr Ile Ser Ile Leu Phe Gly Asn Gly Thr Leu Leu Leu Leu Ile Lys
 35 40 45

Glu Asp His Asn Leu His Glu Pro Met Tyr Phe Phe Leu Ala Met Leu
 50 55 60
 Ala Ala Thr Asp Leu Gly Leu Ala Leu Thr Thr Met Pro Thr Val Leu
 65 70 75 80
 Gly Val Leu Trp Leu Asp His Arg Glu Ile Gly Ser Ala Ala Cys Phe
 85 90 95
 Ser Gln Ala Tyr Phe Ile His Ser Leu Ser Phe Leu Glu Ser Gly Ile
 100 105 110
 Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu
 115 120 125
 Arg Tyr Thr Ser Val Leu Thr Asn Thr Arg Val Val Lys Ile Gly Leu
 130 135 140
 Gly Val Leu Met Arg Gly Phe Val Ser Val Val Pro Pro Ile Arg Pro
 145 150 155 160
 Leu Tyr Phe Phe Leu Tyr Cys His Ser His Val Leu Ser His Ala Phe
 165 170 175
 Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp Thr Thr Phe
 180 185 190
 Asn Arg Leu Tyr Pro Ala Val Leu Val Val Phe Ile Phe Val Leu Asp
 195 200 205
 Tyr Leu Ile Ile Phe Ile Ser Tyr Val Leu Ile Leu Lys Thr Val Leu
 210 215 220
 Ser Ile Ala Ser Arg Glu Glu Arg Ala Lys Ala Leu Ile Thr Cys Val
 225 230 235 240
 Ser His Ile Cys Cys Val Leu Val Phe Tyr Val Thr Val Ile Gly Leu
 245 250 255
 Ser Leu Ile His Arg Phe Gly Lys Gln Val Pro His Ile Val His Leu
 260 265 270
 Ile Met Ser Tyr Ala Tyr Phe Leu Phe Pro Pro Leu Met Asn Pro Ile
 275 280 285
 Thr Tyr Ser Val Lys Thr Lys Gln Ile Gln Asn Ala Ile Leu His Leu
 290 295 300
 Phe Thr Thr His Arg Ile Gly Thr
 305 310

<210> 13
 <211> 988
 <212> DNA
 <213> Homo sapiens

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atc ctc atg ggc ttt ccc tca agc cca gaa atg cag ctc ctc tac ttt	97
Ile Leu Met Gly Phe Pro Ser Ser Pro Glu Met Gln Leu Leu Tyr Phe	
20 25 30	
ggt ctc ttc tca tta gcc tat act ctc acc ctg atg gga aat gca tcc	145
Gly Leu Phe Ser Leu Ala Tyr Thr Leu Thr Leu Met Gly Asn Ala Ser	
35 40 45	
att gtc tgt gct gtg tgg tgg gac cag cac ctt cac act ccc atg tac	193
Ile Val Cys Ala Val Trp Trp Asp Gln His Leu His Thr Pro Met Tyr	
50 55 60	
acc ctc ttg gga aat ttc tct ctc ctg gaa ata tgt tat gtt att aca	241
Thr Leu Leu Gly Asn Phe Ser Leu Leu Glu Ile Cys Tyr Val Ile Thr	
65 70 75	
act gtt cct aaa ctg ctg gcc aac ttc ctc tcc aca agc aag tcc atc	289
Thr Val Pro Lys Leu Leu Ala Asn Phe Leu Ser Thr Ser Lys Ser Ile	
80 85 90 95	
tca ttc atg agt tgt ttt gca cag ttc tac ttc ttc tta tct ttg ggg	337
Ser Phe Met Ser Cys Phe Ala Gln Phe Tyr Phe Phe Leu Ser Leu Gly	
100 105 110	
tat gat gag ggc ttc ttc ctt tgc atc atg gcc ttt gac agg tat ctt	385
Tyr Asp Glu Gly Phe Phe Leu Cys Ile Met Ala Phe Asp Arg Tyr Leu	
115 120 125	
gcc atc tgc cgc cct cta cgt tat cca tgc att atg aat aag caa gta	433
Ala Ile Cys Arg Pro Leu Arg Tyr Pro Cys Ile Met Asn Lys Gln Val	
130 135 140	
tgc act ggc ctt atc atc ttt gca tgg tca tgt gtc ttt gta atc ttc	481
Cys Thr Gly Leu Ile Ile Phe Ala Trp Ser Cys Val Phe Val Ile Phe	
145 150 155	
cta att ctg ttg att ctc att tca cag ata tcc tac tgt ggc cca aat	529
Leu Ile Leu Leu Ile Leu Ile Ser Gln Ile Ser Tyr Cys Gly Pro Asn	
160 165 170 175	
att atc aac cat ttt gtt tgt gat cct gta cca ttg gtg atg ctg tcc	577
Ile Ile Asn His Phe Val Cys Asp Pro Val Pro Leu Val Met Leu Ser	
180 185 190	
tgt tct gca gac ata atc atc acc tat ctc att tac tcc aca ttc aat	625
Cys Ser Ala Asp Ile Ile Ile Thr Tyr Leu Ile Tyr Ser Thr Phe Asn	
195 200 205	

tct atc ttc atg att ggc acc ttt ctc ttt atc ctt tgt tcc tat gct	673
Ser Ile Phe Met Ile Gly Thr Phe Leu Phe Ile Leu Cys Ser Tyr Ala	
210 215 220	
ctg gtg att ctg gct gta ata cag atg cct tca gag gct ggc aaa cga	721
Leu Val Ile Leu Ala Val Ile Gln Met Pro Ser Glu Ala Gly Lys Arg	
225 230 235	
aag gct ttc tcc act tgt gcc tct cat ttg gca gtt gtc acc ttg ttt	769
Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ala Val Val Thr Leu Phe	
240 245 250 255	
tat ggc tct atc atg gtg atg tat gtt agt cct gga tca gca cac cca	817
Tyr Gly Ser Ile Met Val Met Tyr Val Ser Pro Gly Ser Ala His Pro	
260 265 270	
gta aaa atg caa aaa atc att acc ttg ttc tat tct gtg ata aca cca	865
Val Lys Met Gln Lys Ile Ile Thr Leu Phe Tyr Ser Val Ile Thr Pro	
275 280 285	
ctc tgt aat cct cta ata tat agt ctc agg agc aaa gag atg aaa gat	913
Leu Cys Asn Pro Leu Ile Tyr Ser Leu Arg Ser Lys Glu Met Lys Asp	
290 295 300	
tct ctg agg aaa atc ttc agg act gga aaa gat gtt aat aaa ata	958
Ser Leu Arg Lys Ile Phe Arg Thr Gly Lys Asp Val Asn Lys Ile	
305 310 315	
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Leu Phe Ser Leu Ala Tyr Thr Leu Thr Leu Met Gly Asn Ala Ser Ile	
35 40 45	
Val Cys Ala Val Trp Trp Asp Gln His Leu His Thr Pro Met Tyr Thr	
50 55 60	
Leu Leu Gly Asn Phe Ser Leu Leu Glu Ile Cys Tyr Val Ile Thr Thr	
65 70 75 80	
Val Pro Lys Leu Leu Ala Asn Phe Leu Ser Thr Ser Lys Ser Ile Ser	
85 90 95	
Phe Met Ser Cys Phe Ala Gln Phe Tyr Phe Phe Leu Ser Leu Gly Tyr	
100 105 110	

Asp Glu Gly Phe Phe Leu Cys Ile Met Ala Phe Asp Arg Tyr Leu Ala
 115 120 125
 Ile Cys Arg Pro Leu Arg Tyr Pro Cys Ile Met Asn Lys Gln Val Cys
 130 135 140
 Thr Gly Leu Ile Ile Phe Ala Trp Ser Cys Val Phe Val Ile Phe Leu
 145 150 155 160
 Ile Leu Leu Ile Leu Ile Ser Gln Ile Ser Tyr Cys Gly Pro Asn Ile
 165 170 175
 Ile Asn His Phe Val Cys Asp Pro Val Pro Leu Val Met Leu Ser Cys
 180 185 190
 Ser Ala Asp Ile Ile Ile Thr Tyr Leu Ile Tyr Ser Thr Phe Asn Ser
 195 200 205
 Ile Phe Met Ile Gly Thr Phe Leu Phe Ile Leu Cys Ser Tyr Ala Leu
 210 215 220
 Val Ile Leu Ala Val Ile Gln Met Pro Ser Glu Ala Gly Lys Arg Lys
 225 230 235 240
 Ala Phe Ser Thr Cys Ala Ser His Leu Ala Val Val Thr Leu Phe Tyr
 245 250 255
 Gly Ser Ile Met Val Met Tyr Val Ser Pro Gly Ser Ala His Pro Val
 260 265 270
 Lys Met Gln Lys Ile Ile Thr Leu Phe Tyr Ser Val Ile Thr Pro Leu
 275 280 285
 Cys Asn Pro Leu Ile Tyr Ser Leu Arg Ser Lys Glu Met Lys Asp Ser
 290 295 300
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 305 310 315

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 <213> Homo sapiens

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 gaa ttt ata ctc caa ggt ttc tct tgt gag tgg aca att cag atc ttc 98
 Glu Phe Ile Leu Gln Gly Phe Ser Cys Glu Trp Thr Ile Gln Ile Phe
 15 20 25 30

ctc ttc tca ctc ttt act aca ata tat gca ctg act ata aca ggg aat	146
Leu Phe Ser Leu Phe Thr Thr Ile Tyr Ala Leu Thr Ile Thr Gly Asn	
35 40 45	
gga gcc att gct ttt gtc ctg tgg tgt gac cgg cga ctt cac act ccc	194
Gly Ala Ile Ala Phe Val Leu Trp Cys Asp Arg Arg Leu His Thr Pro	
50 55 60	
atg tac atg ttc ctg gga aat ttc tcc ttt tta gag ata tgg tat gtc	242
Met Tyr Met Phe Leu Gly Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val	
65 70 75	
tct tct aca gtt ccc aag atg ttg gtc aac ttc ctt tca gag aaa aaa	290
Ser Ser Thr Val Pro Lys Met Leu Val Asn Phe Leu Ser Glu Lys Lys	
80 85 90	
aac atc tcc ttt gct gga tgt ttt ctc cag ttt tat ttc ttc ttc tct	338
Asn Ile Ser Phe Ala Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser	
95 100 105 110	
ttg ggt aca tca gaa tgc ttg ctt ttg act gtg atg gcc ttt gat cag	386
Leu Gly Thr Ser Glu Cys Leu Leu Leu Thr Val Met Ala Phe Asp Gln	
115 120 125	
tac ctt gct atc tgc cgt ccc ttg ctc tat cct aat atc atg act ggg	434
Tyr Leu Ala Ile Cys Arg Pro Leu Leu Tyr Pro Asn Ile Met Thr Gly	
130 135 140	
cat ctc tat gcc aaa ctg gtc ata ctg tgc tgg gtt tgt gga ttt ctg	482
His Leu Tyr Ala Lys Leu Val Ile Leu Cys Trp Val Cys Gly Phe Leu	
145 150 155	
tgg ttc ctg atc ccc att gtt ctc atc tct cag aag ccc ttc tgt ggc	530
Trp Phe Leu Ile Pro Ile Val Leu Ile Ser Gln Lys Pro Phe Cys Gly	
160 165 170	
cca aac att att gac cat gtt gtg tgt gac cca ggg cca cta ttt gca	578
Pro Asn Ile Ile Asp His Val Val Cys Asp Pro Gly Pro Leu Phe Ala	
175 180 185 190	
ttg gat tgt gtt tct gcc cca aga atc caa ctg ttt tgc tac act cta	626
Leu Asp Cys Val Ser Ala Pro Arg Ile Gln Leu Phe Cys Tyr Thr Leu	
195 200 205	
agc tca tta gtt att ttt ggt aac ttc ctc ttt att att gga tcc tat	674
Ser Ser Leu Val Ile Phe Gly Asn Phe Leu Phe Ile Ile Gly Ser Tyr	
210 215 220	
act ctt gtc ctg aaa gct gtg ttg ggt atg cct tca agc act ggg aga	722
Thr Leu Val Leu Lys Ala Val Leu Gly Met Pro Ser Ser Thr Gly Arg	
225 230 235	
cat aag gcc ttc tct acc tgt ggg tct cat ttg gct gtg gta tca ctg	770
His Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Ser Leu	
240 245 250	
tgc tat agc cct ctt atg gtc atg tat gtg agc cca gga ctc gga cat	818

Cys Tyr Ser Pro Leu Met Val Met Tyr Val Ser Pro Gly Leu Gly His
 255 260 265 270
 tct aca ggg atg cag aaa att gaa act ttg ttc tat gct atg gtg acc 866
 Ser Thr Gly Met Gln Lys Ile Glu Thr Leu Phe Tyr Ala Met Val Thr
 275 280 285
 cca ctc ttc aat ccc ctt atc tat agc ctc cag aat aag gag ata aag 914
 Pro Leu Phe Asn Pro Leu Ile Tyr Ser Leu Gln Asn Lys Glu Ile Lys
 290 295 300
 gca gcc ctg agg aaa gtt ctg ggg agt tcc aac ata atc taaggcatat 963
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 305 310 315
 tagattattc ctccatgatc agatca 989
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 <212> PRT
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 Ile Leu Gln Gly Phe Ser Cys Glu Trp Thr Ile Gln Ile Phe Leu Phe
 20 25 30
 Ser Leu Phe Thr Thr Ile Tyr Ala Leu Thr Ile Thr Gly Asn Gly Ala
 35 40 45
 Ile Ala Phe Val Leu Trp Cys Asp Arg Arg Leu His Thr Pro Met Tyr
 50 55 60
 Met Phe Leu Gly Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Ser Ser
 65 70 75 80
 Thr Val Pro Lys Met Leu Val Asn Phe Leu Ser Glu Lys Lys Asn Ile
 85 90 95
 Ser Phe Ala Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly
 100 105 110
 Thr Ser Glu Cys Leu Leu Leu Thr Val Met Ala Phe Asp Gln Tyr Leu
 115 120 125
 Ala Ile Cys Arg Pro Leu Leu Tyr Pro Asn Ile Met Thr Gly His Leu
 130 135 140
 Tyr Ala Lys Leu Val Ile Leu Cys Trp Val Cys Gly Phe Leu Trp Phe
 145 150 155 160
 Leu Ile Pro Ile Val Leu Ile Ser Gln Lys Pro Phe Cys Gly Pro Asn
 165 170 175
 Ile Ile Asp His Val Val Cys Asp Pro Gly Pro Leu Phe Ala Leu Asp

180	185	190
Cys Val Ser Ala Pro Arg Ile Gln Leu Phe Cys Tyr Thr Leu Ser Ser		
195	200	205
Leu Val Ile Phe Gly Asn Phe Leu Phe Ile Ile Gly Ser Tyr Thr Leu		
210	215	220
Val Leu Lys Ala Val Leu Gly Met Pro Ser Ser Thr Gly Arg His Lys		
225	230	235
Ala Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Ser Leu Cys Tyr		
245	250	255
Ser Pro Leu Met Val Met Tyr Val Ser Pro Gly Leu Gly His Ser Thr		
260	265	270
Gly Met Gln Lys Ile Glu Thr Leu Phe Tyr Ala Met Val Thr Pro Leu		
275	280	285
Phe Asn Pro Leu Ile Tyr Ser Leu Gln Asn Lys Glu Ile Lys Ala Ala		
290	295	300
Leu Arg Lys Val Leu Gly Ser Ser Asn Ile Ile		
305	310	315

<210> 17
 <211> 987
 <212> DNA
 <213> Homo sapiens

<400> 17
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 tatttgatga tcctgatgtg caatggcatc ataatactac taataaaaat tcaccccgct 180
 ctccagactc ccatgtattt ttttcttagc aatttttccc ttttggaat ctgttatgta 240
 acaatcatta tcccaagaat gctcatggac atttggaacca gaaaggaaat atttctttgt 300
 ttgcttgtgc tacacaaatg tgtttttttc ttatgcttgg aggcacggag tgtctccttc 360
 tgacagtgat ggccatgatc cgctacgtgg ctatttgtaa gcctttgcag taccctctag 420
 tgatgaacca caaagtctgc attcagctga taatagcttc ctggaccatc acaattcctg 480
 tagtaattgg ggaaacatgc caaattttcc ttttgccctt ttgcggaact aacacaatta 540
 atcatttctt ttgtgacatc ccgccaatac tcaagcttgc ttgtggaaac atatttgtga 600
 atgagataac agtccatgta gtagcgggtg tgtttatcac ggtgccattt ctgttgattg 660
 ttgtctctta tggcaaaatt atctccaaca ttttgaaatg tcatcagcca gaggaaaggc 720
 taaagccttc tccacctgct catctcacct aatagttgta atcttattct ttggagcagg 780
 tactatcact tatttacagc ccaaaccaca tcagtttcaa aggatgggga aactgatttc 840
 tcttttctac accattctga ttccaacttt gaatcctatt atatataccc tgaggaacaa 900
 agatatcatg gtggcattga gaaaattact agctaagtta ttaacatgag atgaagactt 960
 gaaattacag aaataatttc tttatag 987

<210> 18
 <211> 316
 <212> PRT
 <213> Homo sapiens

<400> 18
 Met Gly Glu Gln Thr Lys Arg Glu Lys Ser Asn Val Thr Thr Ile Met

1	5	10	15
Glu Phe Val	Leu Leu Gly Phe Ser Asp	Ile Pro Asn Leu His Trp Met	
	20	25	30
Leu Phe Ser	Ile Phe Leu Leu Met Tyr Leu Met	Ile Leu Met Cys Asn	
	35	40	45
Gly Ile Ile	Ile Leu Leu Ile Lys Ile His Pro Ala Leu Gln Thr Pro		
	50	55	60
Met Tyr Phe Phe	Leu Ser Asn Phe Ser Leu Leu Glu Ile Cys Tyr Val		
	65	70	75
Thr Ile Ile Ile	Pro Arg Met Leu Met Asp Ile Trp Thr Gln Lys Gly		
	85	90	95
Asn Ile Ser Leu Phe Ala Cys Ala Thr Gln Met Cys Phe Phe Leu Met			
	100	105	110
Leu Gly Gly Thr Glu Cys Leu Leu Leu Thr Val Met Ala Tyr Asp Arg			
	115	120	125
Tyr Val Ala Ile Cys Lys Pro Leu Gln Tyr Pro Leu Val Met Asn His			
	130	135	140
Lys Val Cys Ile Gln Leu Ile Ile Ala Ser Trp Thr Ile Thr Ile Pro			
	145	150	155
Val Val Ile Gly Glu Thr Cys Gln Ile Phe Leu Leu Pro Phe Cys Gly			
	165	170	175
Thr Asn Thr Ile Asn His Phe Phe Cys Asp Ile Pro Pro Ile Leu Lys			
	180	185	190
Leu Ala Cys Gly Asn Ile Phe Val Asn Glu Ile Thr Val His Val Val			
	195	200	205
Ala Val Val Phe Ile Thr Val Pro Phe Leu Leu Ile Val Val Ser Tyr			
	210	215	220
Gly Lys Ile Ile Ser Asn Ile Leu Lys Leu Ser Ser Ala Arg Gly Lys			
	225	230	235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Val Ile Leu			
	245	250	255
Phe Phe Gly Ala Gly Thr Ile Thr Tyr Leu Gln Pro Lys Pro His Gln			
	260	265	270
Phe Gln Arg Met Gly Lys Leu Ile Ser Leu Phe Tyr Thr Ile Leu Ile			
	275	280	285
Pro Thr Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn Lys Asp Ile Met			
	290	295	300
Val Ala Leu Arg Lys Leu Leu Ala Lys Leu Leu Thr			

305

310

315

<210> 19
 <211> 999
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (3)..(941)

<400> 19

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1 5 10 15	

gga ttg aca gat cat gct gaa cta aaa gct gtg ctt ttt gtg gtg ttc	95
Gly Leu Thr Asp His Ala Glu Leu Lys Ala Val Leu Phe Val Val Phe	
20 25 30	

ctg gtg att tac gcc att acc ttg ttg agg aat ctg ggc atg atc ctc	143
Leu Val Ile Tyr Ala Ile Thr Leu Leu Arg Asn Leu Gly Met Ile Leu	
35 40 45	

tta atc caa atc acc tcc aaa ctc cac aca ccc atg tac ttt tta ctc	191
Leu Ile Gln Ile Thr Ser Lys Leu His Thr Pro Met Tyr Phe Leu Leu	
50 55 60	

agc tgt ctt tca ttt gtg gat gcc tgc tat tca tct gca att gca ccc	239
Ser Cys Leu Ser Phe Val Asp Ala Cys Tyr Ser Ser Ala Ile Ala Pro	
65 70 75	

aaa atg ctg gtg aac ctc ctg gtt gtg aag gca aca att tct ttc tct	287
Lys Met Leu Val Asn Leu Leu Val Val Lys Ala Thr Ile Ser Phe Ser	
80 85 90 95	

gct tgc atg gta cag cat ttg tgt ttc gga gtg ttc atc acc aca gaa	335
Ala Cys Met Val Gln His Leu Cys Phe Gly Val Phe Ile Thr Thr Glu	
100 105 110	

ggc ttc tta ctg tca gtg atg gcc tat gac cgc tat gtg gcc att gtg	383
Gly Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Val	
115 120 125	

agt ccc ttg ctt tac act gta gcc atg tct gat aga aag tgt gtg gag	431
Ser Pro Leu Leu Tyr Thr Val Ala Met Ser Asp Arg Lys Cys Val Glu	
130 135 140	

ctt gtc aca gga tca tgg ata ggt gga ata gtt aac aca tta atc cac	479
Leu Val Thr Gly Ser Trp Ile Gly Gly Ile Val Asn Thr Leu Ile His	
145 150 155	

aca atc agc ttg agg aga ctg tcc ttt tgt agg cta aat gct gtc agc	527
Thr Ile Ser Leu Arg Arg Leu Ser Phe Cys Arg Leu Asn Ala Val Ser	
160 165 170 175	

cac ttc ttc tgt gac att cct tca ctg cta aag ctg tca tgt tct gac	575
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His Phe Phe Cys Asp Ile Pro Ser Leu Leu Lys Leu Ser Cys Ser Asp
 180 185 190

acc tcc atg aat gag ttg ttg ctg tta acc ttc tcc gga gtc att gcc 623
 Thr Ser Met Asn Glu Leu Leu Leu Leu Thr Phe Ser Gly Val Ile Ala
 195 200 205

atg gcc acc ttc ttg act gtg atc att tcc tac atc ttc att gct ttt 671
 Met Ala Thr Phe Leu Thr Val Ile Ile Ser Tyr Ile Phe Ile Ala Phe
 210 215 220

gct agc cta agg atc cac tca gca tca ggc aga cag caa gcc ttc tcc 719
 Ala Ser Leu Arg Ile His Ser Ala Ser Gly Arg Gln Gln Ala Phe Ser
 225 230 235

acc tgt gcc tct cac ctg act gct gtg acc ata ttc tat ggt acc tta 767
 Thr Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu
 240 245 250 255

atc ttt agc tac att cag cca agc tcc cag tat ttt gtg gaa caa gag 815
 Ile Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Phe Val Glu Gln Glu
 260 265 270

aaa gtg gtt tct atg ttc tat acg cta ggg att ccc atg tta aac ctg 863
 Lys Val Val Ser Met Phe Tyr Thr Leu Gly Ile Pro Met Leu Asn Leu
 275 280 285

ttg ata cac agt ttg aga aac aag gac gta aag gag gca gtg aaa agg 911
 Leu Ile His Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Val Lys Arg
 290 295 300

atg ggc caa cac aat cta aca gtg ctt aac tgaattcatt ctgatggaac 961
 Met Gly Gln His Asn Leu Thr Val Leu Asn
 305 310

tcacaaggcg gcctgagctg cagattcccc tttttgga 999

<210> 20
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 20
 Met Ala Asp Asp Asn Phe Thr Val Val Thr Glu Phe Ile Leu Leu Gly
 1 5 10 15
 Leu Thr Asp His Ala Glu Leu Lys Ala Val Leu Phe Val Val Phe Leu
 20 25 30
 Val Ile Tyr Ala Ile Thr Leu Leu Arg Asn Leu Gly Met Ile Leu Leu
 35 40 45
 Ile Gln Ile Thr Ser Lys Leu His Thr Pro Met Tyr Phe Leu Leu Ser
 50 55 60
 Cys Leu Ser Phe Val Asp Ala Cys Tyr Ser Ser Ala Ile Ala Pro Lys
 65 70 75 80

Met Leu Val Asn Leu Leu Val Val Lys Ala Thr Ile Ser Phe Ser Ala
 85 90 95
 Cys Met Val Gln His Leu Cys Phe Gly Val Phe Ile Thr Thr Glu Gly
 100 105 110
 Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Val Ser
 115 120 125
 Pro Leu Leu Tyr Thr Val Ala Met Ser Asp Arg Lys Cys Val Glu Leu
 130 135 140
 Val Thr Gly Ser Trp Ile Gly Gly Ile Val Asn Thr Leu Ile His Thr
 145 150 155 160
 Ile Ser Leu Arg Arg Leu Ser Phe Cys Arg Leu Asn Ala Val Ser His
 165 170 175
 Phe Phe Cys Asp Ile Pro Ser Leu Leu Lys Leu Ser Cys Ser Asp Thr
 180 185 190
 Ser Met Asn Glu Leu Leu Leu Leu Thr Phe Ser Gly Val Ile Ala Met
 195 200 205
 Ala Thr Phe Leu Thr Val Ile Ile Ser Tyr Ile Phe Ile Ala Phe Ala
 210 215 220
 Ser Leu Arg Ile His Ser Ala Ser Gly Arg Gln Gln Ala Phe Ser Thr
 225 230 235 240
 Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile
 245 250 255
 Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Phe Val Glu Gln Glu Lys
 260 265 270
 Val Val Ser Met Phe Tyr Thr Leu Gly Ile Pro Met Leu Asn Leu Leu
 275 280 285
 Ile His Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Val Lys Arg Met
 290 295 300
 Gly Gln His Asn Leu Thr Val Leu Asn
 305 310

<210> 21
 <211> 974
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (3)..(959)

<400> 21
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Met	Asp	Leu	Tyr	Lys	Leu	Gln	Leu	Asn	Asn	Phe	Thr	Glu	Val	Thr		
1				5				10						15		
atg	ttt	ata	tta	ata	agc	ttc	aca	gaa	gaa	ttt	gat	gtg	caa	gtc	ttc	95
Met	Phe	Ile	Leu	Ile	Ser	Phe	Thr	Glu	Glu	Phe	Asp	Val	Gln	Val	Phe	
			20					25					30			
cta	ttt	tta	tta	ttt	tta	gca	atc	tat	cta	ttc	act	cta	ata	ggc	aat	143
Leu	Phe	Leu	Leu	Phe	Leu	Ala	Ile	Tyr	Leu	Phe	Thr	Leu	Ile	Gly	Asn	
			35					40					45			
tta	ggg	ctg	gtt	gta	ccg	atc	att	ggg	gat	ttc	tgg	ctt	cac	agc	cca	191
Leu	Gly	Leu	Val	Val	Pro	Ile	Ile	Gly	Asp	Phe	Trp	Leu	His	Ser	Pro	
		50					55					60				
atg	tac	tat	ttt	ctt	ggc	gtt	tta	tca	ttc	ttg	gat	gtc	tgc	tat	tct	239
Met	Tyr	Tyr	Phe	Leu	Gly	Val	Leu	Ser	Phe	Leu	Asp	Val	Cys	Tyr	Ser	
	65					70					75					
aca	gtt	gtc	act	cca	aaa	atg	ttg	gtc	aat	ttc	ctg	gca	aaa	aat	aaa	287
Thr	Val	Val	Thr	Pro	Lys	Met	Leu	Val	Asn	Phe	Leu	Ala	Lys	Asn	Lys	
	80				85				90					95		
tct	att	tca	ttt	ctt	gga	tgt	gca	aca	cag	atg	ttt	ctt	gct	tgt	act	335
Ser	Ile	Ser	Phe	Leu	Gly	Cys	Ala	Thr	Gln	Met	Phe	Leu	Ala	Cys	Thr	
			100						105				110			
ttt	gga	acc	aca	gaa	tgc	ttt	ctc	ttg	gct	gca	atg	gct	tat	gat	cgc	383
Phe	Gly	Thr	Thr	Glu	Cys	Phe	Leu	Leu	Ala	Ala	Met	Ala	Tyr	Asp	Arg	
			115					120					125			
tat	gta	gcc	atc	tac	aac	cct	ctc	ctg	tat	tca	gtg	agc	atg	tca	ccc	431
Tyr	Val	Ala	Ile	Tyr	Asn	Pro	Leu	Leu	Tyr	Ser	Val	Ser	Met	Ser	Pro	
		130					135					140				
aga	gtc	tat	gtg	cca	ctc	atc	act	gct	tcc	tat	gtt	gct	agc	att	tta	479
Arg	Val	Tyr	Val	Pro	Leu	Ile	Thr	Ala	Ser	Tyr	Val	Ala	Ser	Ile	Leu	
	145					150					155					
cat	gct	act	ata	cat	aca	gtg	gct	aca	ttt	agc	ctg	tcc	ttc	tgt	gga	527
His	Ala	Thr	Ile	His	Thr	Val	Ala	Thr	Phe	Ser	Leu	Ser	Phe	Cys	Gly	
	160				165				170					175		
tcc	aat	gaa	att	agg	cat	gtc	ttt	tgt	aat	atg	cct	cct	ctg	ctt	gct	575
Ser	Asn	Glu	Ile	Arg	His	Val	Phe	Cys	Asn	Met	Pro	Pro	Leu	Leu	Ala	
			180						185				190			
att	tct	tgt	tct	gac	act	cac	gta	atc	cag	ctt	cta	ttc	ttc	tac	ttt	623
Ile	Ser	Cys	Ser	Asp	Thr	His	Val	Ile	Gln	Leu	Leu	Phe	Phe	Tyr	Phe	
			195					200					205			
gtg	ggc	tct	att	gag	ata	gtc	act	atc	ctg	att	gtc	ctg	atc	tcc	tat	671
Val	Gly	Ser	Ile	Glu	Ile	Val	Thr	Ile	Leu	Ile	Val	Leu	Ile	Ser	Tyr	
		210					215					220				
ggc	ttt	att	ctg	ttg	gcc	att	ctg	aag	atg	cag	tct	gct	gaa	ggg	agg	719
Gly	Phe	Ile	Leu	Leu	Ala	Ile	Leu	Lys	Met	Gln	Ser	Ala	Glu	Gly	Arg	

225	230	235	
aga aaa gtc ttc tct	aca tgt gga gct cac cta	act gga gtg aca att	767
Arg Lys Val Phe Ser	Thr Cys Gly Ala His	Leu Thr Gly Val Thr	Ile
240	245	250	255
tat cat ggg aca atc	ctc ttc atg tat	gtg aga cca agt tcc	agc tac
Tyr His Gly Thr	Ile Leu Phe Met	Tyr Val Arg Pro	Ser Ser Tyr
260	265	270	
act tcg gac aat gac	atg ata gtg tca ata	ttt tat acc att	gtg att
Thr Ser Asp Asn Asp	Met Ile Val Ser	Ile Phe Tyr Thr	Ile Val Ile
275	280	285	
ccc atg ctg aat ccc	atc atc tac agt ttg	cgg aac aaa gat	gta aag
Pro Met Leu Asn Pro	Ile Ile Tyr Ser	Leu Arg Asn Lys	Asp Val Lys
290	295	300	
gag gca atc aaa aga	ttg ctt gtg aga aat	tgg ttc ata aat	aag tta
Glu Ala Ile Lys Arg	Leu Leu Val Arg	Asn Trp Phe Ile	Asn Lys Leu
305	310	315	
tagttttaaa attga			974
<210> 22			
<211> 319			
<212> PRT			
<213> Homo sapiens			
<400> 22			
Met Asp Leu Tyr Lys	Leu Gln Leu Asn Asn	Phe Thr Glu Val Thr	Met
1	5	10	15
Phe Ile Leu Ile Ser	Phe Thr Glu Glu	Phe Asp Val Gln	Val Phe Leu
20	25	30	
Phe Leu Leu Phe Leu	Ala Ile Tyr Leu	Phe Thr Leu Ile	Gly Asn Leu
35	40	45	
Gly Leu Val Val Pro	Ile Ile Gly Asp	Phe Trp Leu His	Ser Pro Met
50	55	60	
Tyr Tyr Phe Leu Gly	Val Leu Ser Phe	Leu Asp Val Cys	Tyr Ser Thr
65	70	75	80
Val Val Thr Pro Lys	Met Leu Val Asn	Phe Leu Ala Lys	Asn Lys Ser
85	90	95	
Ile Ser Phe Leu Gly	Cys Ala Thr Gln	Met Phe Leu Ala	Cys Thr Phe
100	105	110	
Gly Thr Thr Glu Cys	Phe Leu Leu Ala	Ala Met Ala Tyr	Asp Arg Tyr
115	120	125	
Val Ala Ile Tyr Asn	Pro Leu Leu Tyr	Ser Val Ser Met	Ser Pro Arg
130	135	140	

Val Tyr Val Pro Leu Ile Thr Ala Ser Tyr Val Ala Ser Ile Leu His
 145 150 155 160
 Ala Thr Ile His Thr Val Ala Thr Phe Ser Leu Ser Phe Cys Gly Ser
 165 170 175
 Asn Glu Ile Arg His Val Phe Cys Asn Met Pro Pro Leu Leu Ala Ile
 180 185 190
 Ser Cys Ser Asp Thr His Val Ile Gln Leu Leu Phe Phe Tyr Phe Val
 195 200 205
 Gly Ser Ile Glu Ile Val Thr Ile Leu Ile Val Leu Ile Ser Tyr Gly
 210 215 220
 Phe Ile Leu Leu Ala Ile Leu Lys Met Gln Ser Ala Glu Gly Arg Arg
 225 230 235 240
 Lys Val Phe Ser Thr Cys Gly Ala His Leu Thr Gly Val Thr Ile Tyr
 245 250 255
 His Gly Thr Ile Leu Phe Met Tyr Val Arg Pro Ser Ser Ser Tyr Thr
 260 265 270
 Ser Asp Asn Asp Met Ile Val Ser Ile Phe Tyr Thr Ile Val Ile Pro
 275 280 285
 Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu
 290 295 300
 Ala Ile Lys Arg Leu Leu Val Arg Asn Trp Phe Ile Asn Lys Leu
 305 310 315

<210> 23
 <211> 966
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (14)..(955)

<400> 23
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 Met Glu Lys Arg Asn Leu Thr Val Val Arg Glu Phe
 1 5 10
 gtc ctt ctg gga ctt cct agc tca gca gag cag cag cac ctc ctg tct 97
 Val Leu Leu Gly Leu Pro Ser Ser Ala Glu Gln Gln His Leu Leu Ser
 15 20 25
 gtg ctc ttt ctc tgt atg tat tta gcc acc acc ttg ggg aac atg ctc 145
 Val Leu Phe Leu Cys Met Tyr Leu Ala Thr Thr Leu Gly Asn Met Leu
 30 35 40
 atc att gcg acg att ggc ttt gac tct cac ctc cat tcc cct atg tac 193
 Ile Ile Ala Thr Ile Gly Phe Asp Ser His Leu His Ser Pro Met Tyr

45	50	55	60	
ttc ttc ctt agt aac ttg gcc ttt gtt gac atc tgc ttt acg tgc act				241
Phe Phe Leu Ser Asn Leu Ala Phe Val Asp Ile Cys Phe Thr Ser Thr	65	70	75	
aca gtc ccc caa atg gta gtg aat atc ttg act ggc acc aag act atc				289
Thr Val Pro Gln Met Val Val Asn Ile Leu Thr Gly Thr Lys Thr Ile	80	85	90	
tct ttt gca ggc tgc ctc acc cag ctc ttc ttc ttc gtt tct ttt gtg				337
Ser Phe Ala Gly Cys Leu Thr Gln Leu Phe Phe Phe Val Ser Phe Val	95	100	105	
aat atg gac agc ctc ctt ctg tgt gtg atg gcg tat gat aga tat gtg				385
Asn Met Asp Ser Leu Leu Leu Cys Val Met Ala Tyr Asp Arg Tyr Val	110	115	120	
gcg att tgc cac ccc tta cat tac acc gcc aga atg aac ctg tgc ctt				433
Ala Ile Cys His Pro Leu His Tyr Thr Ala Arg Met Asn Leu Cys Leu	125	130	135	140
tgt gtc cag cta gtg gct gga ctg tgg ctt gtt act tac ctc cac gcc				481
Cys Val Gln Leu Val Ala Gly Leu Trp Leu Val Thr Tyr Leu His Ala	145	150	155	
ctc ctg cat act gtc cta ata gca cag ctg tcc ttc tgt gcc tcc aat				529
Leu Leu His Thr Val Leu Ile Ala Gln Leu Ser Phe Cys Ala Ser Asn	160	165	170	
atc atc cat cat ttc ttc tgt gat ctc aat cct ctc ctg cag ctc tct				577
Ile Ile His His Phe Phe Cys Asp Leu Asn Pro Leu Leu Gln Leu Ser	175	180	185	
tgc tct gac gtc tcc ttc aat gta atg atc att ttt gca gta gga ggt				625
Cys Ser Asp Val Ser Phe Asn Val Met Ile Ile Phe Ala Val Gly Gly	190	195	200	
cta ttg gct ctc acg ccc ctt gtc tgt atc ctc gta tct tat gga ctt				673
Leu Leu Ala Leu Thr Pro Leu Val Cys Ile Leu Val Ser Tyr Gly Leu	205	210	215	220
atc ttc tcc act gtt ctg aag atc acc tct act cag ggc aag cag aga				721
Ile Phe Ser Thr Val Leu Lys Ile Thr Ser Thr Gln Gly Lys Gln Arg	225	230	235	
gct gtt tcc acc tgc agc tgc cac ctg tca gtg gtg gtg ttg ttt tac				769
Ala Val Ser Thr Cys Ser Cys His Leu Ser Val Val Val Leu Phe Tyr	240	245	250	
ggc aca gcc atc gcc gtc tat ttc agc cct tca tcc ccc cat atg cct				817
Gly Thr Ala Ile Ala Val Tyr Phe Ser Pro Ser Ser Pro His Met Pro	255	260	265	
gag agc gac act ctg tca acc atc atg tat tca atg gtg gct ccg atg				865
Glu Ser Asp Thr Leu Ser Thr Ile Met Tyr Ser Met Val Ala Pro Met	270	275	280	

ctg aat cct ttc atc tat acc cta agg aac agg gat atg aag agg gga 913
 Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Arg Asp Met Lys Arg Gly
 285 290 295 300

ctt cag aaa atg ctt ctc aag tgc aca gtc ttt cag cag caa 955
 Leu Gln Lys Met Leu Leu Lys Cys Thr Val Phe Gln Gln Gln
 305 310

taatgacctc a 966

<210> 24
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 24
 Met Glu Lys Arg Asn Leu Thr Val Val Arg Glu Phe Val Leu Leu Gly
 1 5 10 15

Leu Pro Ser Ser Ala Glu Gln Gln His Leu Leu Ser Val Leu Phe Leu
 20 25 30

Cys Met Tyr Leu Ala Thr Thr Leu Gly Asn Met Leu Ile Ile Ala Thr
 35 40 45

Ile Gly Phe Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Ser
 50 55 60

Asn Leu Ala Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Gln
 65 70 75 80

Met Val Val Asn Ile Leu Thr Gly Thr Lys Thr Ile Ser Phe Ala Gly
 85 90 95

Cys Leu Thr Gln Leu Phe Phe Phe Val Ser Phe Val Asn Met Asp Ser
 100 105 110

Leu Leu Leu Cys Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
 115 120 125

Pro Leu His Tyr Thr Ala Arg Met Asn Leu Cys Leu Cys Val Gln Leu
 130 135 140

Val Ala Gly Leu Trp Leu Val Thr Tyr Leu His Ala Leu Leu His Thr
 145 150 155 160

Val Leu Ile Ala Gln Leu Ser Phe Cys Ala Ser Asn Ile Ile His His
 165 170 175

Phe Phe Cys Asp Leu Asn Pro Leu Leu Gln Leu Ser Cys Ser Asp Val
 180 185 190

Ser Phe Asn Val Met Ile Ile Phe Ala Val Gly Gly Leu Leu Ala Leu
 195 200 205

Thr Pro Leu Val Cys Ile Leu Val Ser Tyr Gly Leu Ile Phe Ser Thr

210	215	220
Val Leu Lys Ile Thr Ser Thr Gln Gly Lys Gln Arg Ala Val Ser Thr		
225	230	235 240
Cys Ser Cys His Leu Ser Val Val Val Leu Phe Tyr Gly Thr Ala Ile		
	245	250 255
Ala Val Tyr Phe Ser Pro Ser Ser Pro His Met Pro Glu Ser Asp Thr		
	260	265 270
Leu Ser Thr Ile Met Tyr Ser Met Val Ala Pro Met Leu Asn Pro Phe		
	275	280 285
Ile Tyr Thr Leu Arg Asn Arg Asp Met Lys Arg Gly Leu Gln Lys Met		
	290	295 300
Leu Leu Lys Cys Thr Val Phe Gln Gln Gln		
305	310	

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 <213> Homo sapiens

<220>
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Met Gly Asn Ala Ile Ile Thr Val Ile Ile Ser Leu Asn Gln Ser Leu	
1 5 10 15	
cac gtt ccc atg tac ctg ttc ctc ctg aac cta tct gtg gtg gag gtg	96
His Val Pro Met Tyr Leu Phe Leu Leu Asn Leu Ser Val Val Glu Val	
20 25 30	
agt ttc agt gca gtc att acg cct gaa atg ctg gtg gtg ctc tct act	144
Ser Phe Ser Ala Val Ile Thr Pro Glu Met Leu Val Val Leu Ser Thr	
35 40 45	
gag aaa act atg att tct ttt gtg ggc tgt ttt gca cag atg tat ttc	192
Glu Lys Thr Met Ile Ser Phe Val Gly Cys Phe Ala Gln Met Tyr Phe	
50 55 60	
atc ctt ctt ttt ggt ggg act gaa tgt ttt ctc ctg gga gcg atg gct	240
Ile Leu Leu Phe Gly Gly Thr Glu Cys Phe Leu Leu Gly Ala Met Ala	
65 70 75 80	
tat gac cga ttt gct gca att tgc cat cct ctg aac tac cca gtg att	288
Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu Asn Tyr Pro Val Ile	
85 90 95	
atg aac aga ggg gtt ttt atg aaa tta gta ata ttc tca tgg atc tca	336
Met Asn Arg Gly Val Phe Met Lys Leu Val Ile Phe Ser Trp Ile Ser	
100 105 110	

ggg atc atg gtg gct act gtg cag acc act tgg gta ttt agt ttt cca	384
Gly Ile Met Val Ala Thr Val Gln Thr Thr Trp Val Phe Ser Phe Pro	
115 120 125	
ttt tgt ggc ccc aat gaa att aat cat ctc ttc tgt gag act ccc ccg	432
Phe Cys Gly Pro Asn Glu Ile Asn His Leu Phe Cys Glu Thr Pro Pro	
130 135 140	
gta cta gag ctt gtg tgt gca gac acc ttc tta ttt gaa atc tat gcc	480
Val Leu Glu Leu Val Cys Ala Asp Thr Phe Leu Phe Glu Ile Tyr Ala	
145 150 155 160	
ttc aca ggc acc att ttg att gtt atg gtt cct ttc ttg ttg atc ctc	528
Phe Thr Gly Thr Ile Leu Ile Val Met Val Pro Phe Leu Leu Ile Leu	
165 170 175	
ttg tct tac att cga gtt ctg ttt gcc atc ctg aag atg cca tca act	576
Leu Ser Tyr Ile Arg Val Leu Phe Ala Ile Leu Lys Met Pro Ser Thr	
180 185 190	
act ggg aga caa aag gcc ttt tcc acc tgt gcc tct cac ctc aca tct	624
Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Ser	
195 200 205	
gtg acc ctg ttc tat ggc aca gcc aat atg act tat tta caa ccc aaa	672
Val Thr Leu Phe Tyr Gly Thr Ala Asn Met Thr Tyr Leu Gln Pro Lys	
210 215 220	
tct ggc tac tca ccc gaa acc aag aaa ctg atc tca ttg gct tac acg	720
Ser Gly Tyr Ser Pro Glu Thr Lys Lys Leu Ile Ser Leu Ala Tyr Thr	
225 230 235 240	
ttg ctt acc cct ctg ctc aat ccg ctc atc tat agc tta cga aac agt	768
Leu Leu Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Ser	
245 250 255	
gag atg aag agg act ttg ata aaa cta tgg cga aga aaa gtg att tta	816
Glu Met Lys Arg Thr Leu Ile Lys Leu Trp Arg Arg Lys Val Ile Leu	
260 265 270	
cac aca ttc tga	828
His Thr Phe	
275	
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<211> 275	
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<213> Homo sapiens	
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Met Gly Asn Ala Ile Ile Thr Val Ile Ile Ser Leu Asn Gln Ser Leu	
1 5 10 15	
His Val Pro Met Tyr Leu Phe Leu Leu Asn Leu Ser Val Val Glu Val	
20 25 30	

Ser Phe Ser Ala Val Ile Thr Pro Glu Met Leu Val Val Leu Ser Thr
 35 40 45
 Glu Lys Thr Met Ile Ser Phe Val Gly Cys Phe Ala Gln Met Tyr Phe
 50 55 60
 Ile Leu Leu Phe Gly Gly Thr Glu Cys Phe Leu Leu Gly Ala Met Ala
 65 70 75 80
 Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu Asn Tyr Pro Val Ile
 85 90 95
 Met Asn Arg Gly Val Phe Met Lys Leu Val Ile Phe Ser Trp Ile Ser
 100 105 110
 Gly Ile Met Val Ala Thr Val Gln Thr Thr Trp Val Phe Ser Phe Pro
 115 120 125
 Phe Cys Gly Pro Asn Glu Ile Asn His Leu Phe Cys Glu Thr Pro Pro
 130 135 140
 Val Leu Glu Leu Val Cys Ala Asp Thr Phe Leu Phe Glu Ile Tyr Ala
 145 150 155 160
 Phe Thr Gly Thr Ile Leu Ile Val Met Val Pro Phe Leu Leu Ile Leu
 165 170 175
 Leu Ser Tyr Ile Arg Val Leu Phe Ala Ile Leu Lys Met Pro Ser Thr
 180 185 190
 Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser His Leu Thr Ser
 195 200 205
 Val Thr Leu Phe Tyr Gly Thr Ala Asn Met Thr Tyr Leu Gln Pro Lys
 210 215 220
 Ser Gly Tyr Ser Pro Glu Thr Lys Lys Leu Ile Ser Leu Ala Tyr Thr
 225 230 235 240
 Leu Leu Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Ser
 245 250 255
 Glu Met Lys Arg Thr Leu Ile Lys Leu Trp Arg Arg Lys Val Ile Leu
 260 265 270
 His Thr Phe
 275

<210> 27
 <211> 955
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (6)..(944)

<400> 27

taaga atg cct ata gct aac gac acc ccg ttc cat act tct tca ttc cta	50
Met Pro Ile Ala Asn Asp Thr Pro Phe His Thr Ser Ser Phe Leu	
1 5 10 15	
ctg ctg ggt atc cca ggg cta gaa gat gtg cac atc tgg att gga ttc	98
Leu Leu Gly Ile Pro Gly Leu Glu Asp Val His Ile Trp Ile Gly Phe	
20 25 30	
cct ttt ttc tct gtg tat ctt gtt gca ctc ctg gga aat gct gct atc	146
Pro Phe Phe Ser Val Tyr Leu Val Ala Leu Leu Gly Asn Ala Ala Ile	
35 40 45	
ttg ttt gtg atc caa act gag cag agt ctc cat gag ccc atg tac tac	194
Leu Phe Val Ile Gln Thr Glu Gln Ser Leu His Glu Pro Met Tyr Tyr	
50 55 60	
ttc ctg gcc atg ttg gat tcc att gac ctg agc ttg tct acg gcc acc	242
Phe Leu Ala Met Leu Asp Ser Ile Asp Leu Ser Leu Ser Thr Ala Thr	
65 70 75	
att ccc aaa atg ctg ggc atc ttc tgg ttc aat atc aag gaa ata cct	290
Ile Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Ile Lys Glu Ile Pro	
80 85 90 95	
ttt gga ggc tac ctt tct cag atg ttc ttc atc cat ttc ttc act gtc	338
Phe Gly Gly Tyr Leu Ser Gln Met Phe Phe Ile His Phe Phe Thr Val	
100 105 110	
atg gag agc atc gtg ttg gtg gcc atg gcc ttt gac cgc tac att gcc	386
Met Glu Ser Ile Val Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala	
115 120 125	
att tgc aaa cct ctt cgg tac acc atg atc ctc acc agc aaa atc atc	434
Ile Cys Lys Pro Leu Arg Tyr Thr Met Ile Leu Thr Ser Lys Ile Ile	
130 135 140	
agc ctc att gca ggc att gct gtc ctg agg agc ttg tac atg gtc gtt	482
Ser Leu Ile Ala Gly Ile Ala Val Leu Arg Ser Leu Tyr Met Val Val	
145 150 155	
cca ctg gtg ttt ctc ctc tta agg ttg ccc ttc tgt gga cat cgt atc	530
Pro Leu Val Phe Leu Leu Leu Arg Leu Pro Phe Cys Gly His Arg Ile	
160 165 170 175	
atc cct cat act tac tgt gag cac atg ggc att gcc cgt ctg gcc tgt	578
Ile Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys	
180 185 190	
gcc agc atc aaa gtc aac att agg ttt ggt ctt ggc agt att tct ctc	626
Ala Ser Ile Lys Val Asn Ile Arg Phe Gly Leu Gly Ser Ile Ser Leu	
195 200 205	
ttg tta ttg gat gtg ctc ctt att att ctc tcc cat atc agg atc ctc	674
Leu Leu Leu Asp Val Leu Leu Ile Ile Leu Ser His Ile Arg Ile Leu	
210 215 220	

tat gct gtc ttc tgc ctg ccc tcc tgg gaa gct cga ctc aaa gct ctc	722
Tyr Ala Val Phe Cys Leu Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu	
225 230 235	

aac acc tgt ggc tct cac att ggt gtt atc tta gcc ttt tct aca cca	770
Asn Thr Cys Gly Ser His Ile Gly Val Ile Leu Ala Phe Ser Thr Pro	
240 245 250 255	

gca ttt ttc tct ttc ttt aca cac tgc ttt ggc cat gat att ccc caa	818
Ala Phe Phe Ser Phe Phe Thr His Cys Phe Gly His Asp Ile Pro Gln	
260 265 270	

tat atc cac att ttc ttg gct aat cta tat gtg gtt gtt cct ccc acc	866
Tyr Ile His Ile Phe Leu Ala Asn Leu Tyr Val Val Val Pro Pro Thr	
275 280 285	

ctc aat cct gta atc tat ggg gtc aga acc aaa cat att agg gag aca	914
Leu Asn Pro Val Ile Tyr Gly Val Arg Thr Lys His Ile Arg Glu Thr	
290 295 300	

gtg ctg agg att ttc ttc aag aca gat cac taaggagttg a	955
Val Leu Arg Ile Phe Phe Lys Thr Asp His	
305 310	

<210> 28
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 28	
Met Pro Ile Ala Asn Asp Thr Pro Phe His Thr Ser Ser Phe Leu Leu	
1 5 10 15	

Leu Gly Ile Pro Gly Leu Glu Asp Val His Ile Trp Ile Gly Phe Pro	
20 25 30	

Phe Phe Ser Val Tyr Leu Val Ala Leu Leu Gly Asn Ala Ala Ile Leu	
35 40 45	

Phe Val Ile Gln Thr Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe	
50 55 60	

Leu Ala Met Leu Asp Ser Ile Asp Leu Ser Leu Ser Thr Ala Thr Ile	
65 70 75 80	

Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Ile Lys Glu Ile Pro Phe	
85 90 95	

Gly Gly Tyr Leu Ser Gln Met Phe Phe Ile His Phe Phe Thr Val Met	
100 105 110	

Glu Ser Ile Val Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile	
115 120 125	

Cys Lys Pro Leu Arg Tyr Thr Met Ile Leu Thr Ser Lys Ile Ile Ser	
130 135 140	

Leu Ile Ala Gly Ile Ala Val Leu Arg Ser Leu Tyr Met Val Val Pro
 145 150 155 160
 Leu Val Phe Leu Leu Leu Arg Leu Pro Phe Cys Gly His Arg Ile Ile
 165 170 175
 Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala
 180 185 190
 Ser Ile Lys Val Asn Ile Arg Phe Gly Leu Gly Ser Ile Ser Leu Leu
 195 200 205
 Leu Leu Asp Val Leu Leu Ile Ile Leu Ser His Ile Arg Ile Leu Tyr
 210 215 220
 Ala Val Phe Cys Leu Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu Asn
 225 230 235 240
 Thr Cys Gly Ser His Ile Gly Val Ile Leu Ala Phe Ser Thr Pro Ala
 245 250 255
 Phe Phe Ser Phe Phe Thr His Cys Phe Gly His Asp Ile Pro Gln Tyr
 260 265 270
 Ile His Ile Phe Leu Ala Asn Leu Tyr Val Val Val Pro Pro Thr Leu
 275 280 285
 Asn Pro Val Ile Tyr Gly Val Arg Thr Lys His Ile Arg Glu Thr Val
 290 295 300
 Leu Arg Ile Phe Phe Lys Thr Asp His
 305 310

<210> 29
 <211> 946
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (3)..(935)

<400> 29
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 Met Glu Ile Lys Asn Tyr Ser Ser Ser Thr Ser Gly Phe Ile Leu
 1 5 10 15
 ctg ggc ctc tct tcc aac cct aag ctg cag aaa cct ctc ttt gcc atc 95
 Leu Gly Leu Ser Ser Asn Pro Lys Leu Gln Lys Pro Leu Phe Ala Ile
 20 25 30
 ttc ctc atc atg tac ctg ctc gct gcg gtg ggg aat gtg ctc atc atc 143
 Phe Leu Ile Met Tyr Leu Leu Ala Ala Val Gly Asn Val Leu Ile Ile
 35 40 45
 ccg gcc atc tac tct gac ccc agg ctc cac acc cct atg tac ttt ttt 191
 Pro Ala Ile Tyr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe

50	55	60	
ttc agc aac ttg tct ttc atg gat atc tgc ttc aca aca gtc ata gtg			239
Phe Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val			
65	70	75	
cct aag atg ctg gtg aat ttt cta tca gag aca aag gtt atc tcc tat			287
Pro Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys Val Ile Ser Tyr			
80	85	90	95
gtg ggc tgc ctg gcc cag atg tac ttc ttt atg gca ttt ggg aac act			335
Val Gly Cys Leu Ala Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr			
100	105	110	
gac agc tac ctg ctg gcc tct atg gcc atc gac cgg ctg gtg gcc atc			383
Asp Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile			
115	120	125	
tgc aac ccc tta cac tat gat gtg gtt atg aaa cca cgg cat tgc ctg			431
Cys Asn Pro Leu His Tyr Asp Val Val Met Lys Pro Arg His Cys Leu			
130	135	140	
ctc atg cta ttg ggt tct tac agc atc tcc cac cta cat tcc ctg ttc			479
Leu Met Leu Leu Gly Ser Tyr Ser Ile Ser His Leu His Ser Leu Phe			
145	150	155	
cgc gtg cta ctt atg tct cgc ttg tct ttc tgt gcc tct cac atc att			527
Arg Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile			
160	165	170	175
aag cac ttt ttc tgt gac acc cag cct gtg cta aag ctc tcc tgc tct			575
Lys His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser			
180	185	190	
gac aca tcc tcc agc cag atg gtg gtg atg act gag acc tta gct gtc			623
Asp Thr Ser Ser Ser Gln Met Val Val Met Thr Glu Thr Leu Ala Val			
195	200	205	
att gtg acc ccc ttc ctg tgt acc atc ttc tcc tac ctg caa atc atc			671
Ile Val Thr Pro Phe Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile Ile			
210	215	220	
gtc act gtg ctc aga atc ccc tct gca gcc agg aag tgg aag gcc ttc			719
Val Thr Val Leu Arg Ile Pro Ser Ala Ala Arg Lys Trp Lys Ala Phe			
225	230	235	
tct acc tgt ggc tcc cac ctc act gca gta gcc ctt ttc tat ggg agt			767
Ser Thr Cys Gly Ser His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser			
240	245	250	255
att att tat gtc tat ttt agg ccc ctg tcc atg tac tca gtg gtt agg			815
Ile Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr Ser Val Val Arg			
260	265	270	
gac cgg gta gcc aca gtt atg tac aca gta gtg aca ccc atg ctg aac			863
Asp Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Leu Asn			
275	280	285	

cct ttc atc tac agc ctg agg aac aaa gat atg aag agg ggt ttg aag 911
 Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu Lys
 290 295 300

aaa tta cag gac aga att tac cgg taaaaggaac a 946
 Lys Leu Gln Asp Arg Ile Tyr Arg
 305 310

<210> 30
 <211> 311
 <212> PRT
 <213> Homo sapiens

<400> 30
 Met Glu Ile Lys Asn Tyr Ser Ser Ser Thr Ser Gly Phe Ile Leu Leu
 1 5 10 15

Gly Leu Ser Ser Asn Pro Lys Leu Gln Lys Pro Leu Phe Ala Ile Phe
 20 25 30

Leu Ile Met Tyr Leu Leu Ala Ala Val Gly Asn Val Leu Ile Ile Pro
 35 40 45

Ala Ile Tyr Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Phe
 50 55 60

Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro
 65 70 75 80

Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys Val Ile Ser Tyr Val
 85 90 95

Gly Cys Leu Ala Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp
 100 105 110

Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys
 115 120 125

Asn Pro Leu His Tyr Asp Val Val Met Lys Pro Arg His Cys Leu Leu
 130 135 140

Met Leu Leu Gly Ser Tyr Ser Ile Ser His Leu His Ser Leu Phe Arg
 145 150 155 160

Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys
 165 170 175

His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp
 180 185 190

Thr Ser Ser Ser Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile
 195 200 205

Val Thr Pro Phe Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile Ile Val
 210 215 220

Thr Val Leu Arg Ile Pro Ser Ala Ala Arg Lys Trp Lys Ala Phe Ser
 225 230 235 240
 Thr Cys Gly Ser His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser Ile
 245 250 255
 Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr Ser Val Val Arg Asp
 260 265 270
 Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
 275 280 285
 Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu Lys Lys
 290 295 300
 Leu Gln Asp Arg Ile Tyr Arg
 305 310

<210> 31
 <211> 2673
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (5)..(2656)

<400> 31
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 Met Ala Phe Leu Ile Ile Leu Ile Thr Cys Phe Val Ile Ile Leu
 1 5 10 15
 gct act tca cag cct tgc cag acc cct gat gac ttt gtg gct gcc act 97
 Ala Thr Ser Gln Pro Cys Gln Thr Pro Asp Asp Phe Val Ala Ala Thr
 20 25 30
 tct ccg gga cat atc ata att gga ggt ttg ttt gct att cat gaa ggt 145
 Ser Pro Gly His Ile Ile Ile Gly Gly Leu Phe Ala Ile His Glu Gly
 35 40 45
 gat aat tct ttt ttt tct ttt tct tgg cag gtt att aac aaa ttc ttt 193
 Asp Asn Ser Phe Phe Ser Phe Ser Trp Gln Val Ile Asn Lys Phe Phe
 50 55 60
 gaa ata tca gtt ttt ctt caa act ctt gcc atg ata cac agc att gag 241
 Glu Ile Ser Val Phe Leu Gln Thr Leu Ala Met Ile His Ser Ile Glu
 65 70 75
 atg atc aac aat tca aca ctc tta cct gga gtc aaa ctg ggg tat gaa 289
 Met Ile Asn Asn Ser Thr Leu Leu Pro Gly Val Lys Leu Gly Tyr Glu
 80 85 90 95
 atc tat gac act tgt aca gaa gtc aca gtg gca atg gca gcc act ctg 337
 Ile Tyr Asp Thr Cys Thr Glu Val Thr Val Ala Met Ala Ala Thr Leu
 100 105 110
 agg ttt ctt tct aaa ttc aac tgc tcc aga gaa act gtg gag ttt aag 385

Arg	Phe	Leu	Ser	Lys	Phe	Asn	Cys	Ser	Arg	Glu	Thr	Val	Glu	Phe	Lys		
			115					120					125				
tgt	gac	tat	tcc	agc	tac	atg	cca	aga	gtt	aag	gct	gtc	ata	ggg	tct	433	
Cys	Asp	Tyr	Ser	Ser	Tyr	Met	Pro	Arg	Val	Lys	Ala	Val	Ile	Gly	Ser		
		130					135					140					
ggg	tac	tca	gaa	ata	act	atg	gct	gtc	tcc	agg	atg	ttg	aat	tta	cag	481	
Gly	Tyr	Ser	Glu	Ile	Thr	Met	Ala	Val	Ser	Arg	Met	Leu	Asn	Leu	Gln		
	145					150					155						
ctc	atg	cca	cag	gtg	ggg	tat	gaa	tca	act	gca	gaa	atc	ctg	agt	gac	529	
Leu	Met	Pro	Gln	Val	Gly	Tyr	Glu	Ser	Thr	Ala	Glu	Ile	Leu	Ser	Asp		
160				165					170						175		
aaa	att	cgc	ttt	cct	tca	ttt	tta	cgg	act	gtg	ccc	agt	gac	ttc	cat	577	
Lys	Ile	Arg	Phe	Pro	Ser	Phe	Leu	Arg	Thr	Val	Pro	Ser	Asp	Phe	His		
			180					185						190			
caa	att	aaa	gca	atg	gct	cac	ctg	att	cag	aaa	tct	ggg	tgg	aac	tgg	625	
Gln	Ile	Lys	Ala	Met	Ala	His	Leu	Ile	Gln	Lys	Ser	Gly	Trp	Asn	Trp		
		195					200						205				
att	ggc	atc	ata	acc	aca	gat	gat	gac	tat	gga	cga	ttg	gct	ctt	aac	673	
Ile	Gly	Ile	Ile	Thr	Thr	Asp	Asp	Asp	Tyr	Gly	Arg	Leu	Ala	Leu	Asn		
	210					215						220					
act	ttt	ata	att	cag	gct	gaa	gca	aat	aac	gtg	tgc	ata	gcc	ttc	aaa	721	
Thr	Phe	Ile	Ile	Gln	Ala	Glu	Ala	Asn	Asn	Val	Cys	Ile	Ala	Phe	Lys		
	225				230					235							
gag	gtt	ctt	cca	gcc	ttt	ctt	tca	gat	aat	acc	att	gaa	gtc	aga	atc	769	
Glu	Val	Leu	Pro	Ala	Phe	Leu	Ser	Asp	Asn	Thr	Ile	Glu	Val	Arg	Ile		
240				245					250					255			
aat	cgg	aca	ctg	aag	aaa	atc	att	tta	gaa	gcc	cag	gtt	aat	gtc	att	817	
Asn	Arg	Thr	Leu	Lys	Lys	Ile	Ile	Leu	Glu	Ala	Gln	Val	Asn	Val	Ile		
			260					265					270				
gtg	gta	ttt	ctg	agg	caa	ttc	cat	gtt	ttt	gat	ctc	ttc	aat	aaa	gcc	865	
Val	Val	Phe	Leu	Arg	Gln	Phe	His	Val	Phe	Asp	Leu	Phe	Asn	Lys	Ala		
		275				280						285					
att	gaa	atg	aat	ata	aat	aag	atg	tgg	att	gct	agt	gat	aat	tgg	tca	913	
Ile	Glu	Met	Asn	Ile	Asn	Lys	Met	Trp	Ile	Ala	Ser	Asp	Asn	Trp	Ser		
	290					295						300					
act	gcc	acc	aag	att	acc	acc	att	cct	aat	gtt	aaa	aag	att	ggc	aaa	961	
Thr	Ala	Thr	Lys	Ile	Thr	Thr	Ile	Pro	Asn	Val	Lys	Lys	Ile	Gly	Lys		
	305				310					315							
gtt	gta	ggg	ttt	gcc	ttt	aga	aga	ggg	aat	ata	tcc	tct	ttc	cat	tcc	1009	
Val	Val	Gly	Phe	Ala	Phe	Arg	Arg	Gly	Asn	Ile	Ser	Ser	Phe	His	Ser		
320				325				330						335			
ttt	ctt	caa	aat	ctg	tca	gaa	gct	aaa	agc	aga	aac	tcc	aag	ttc	aca	1057	
Phe	Leu	Gln	Asn	Leu	Ser	Glu	Ala	Lys	Ser	Arg	Asn	Ser	Lys	Phe	Thr		

340										345										350										
tcg gtt ttc ttc agt ttg cct gag ata tca ggc aaa gct tca tgt gtt	1105																													
Ser Val Phe Phe Ser Leu Pro Glu Ile Ser Gly Lys Ala Ser Cys Val																														
355 360 365																														
aaa ata tgc ctt aaa ctc att cat agt att cag ctt gca gtg ttt gcc	1153																													
Lys Ile Cys Leu Lys Leu Ile His Ser Ile Gln Leu Ala Val Phe Ala																														
370 375 380																														
ctt ggt tat gcc att cgg gat ctg tgt caa gct cgt gac tgt cag aac	1201																													
Leu Gly Tyr Ala Ile Arg Asp Leu Cys Gln Ala Arg Asp Cys Gln Asn																														
385 390 395																														
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Pro Asn Ala Phe Gln Pro Trp Glu Leu Leu Gly Val Leu Lys Asn Val																														
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Met Thr Val Thr Lys Met Ala Glu Tyr Asp Leu Ala Asn Ser Ala Phe																														
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tca ttc act gca aga aat ttt aaa aat att tcc tac att caa tct aaa	1441																													
Ser Phe Thr Ala Arg Asn Phe Lys Asn Ile Ser Tyr Ile Gln Ser Lys																														
465 470 475																														
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Cys Ser Lys Glu Cys Ser Pro Gly Gln Met Lys Lys Thr Thr Arg Ser																														
480 485 490 495																														
caa cac atc tgt tgc tat gaa tgt cag aac tgt cct gaa aat cat tac	1537																													
Gln His Ile Cys Cys Tyr Glu Cys Gln Asn Cys Pro Glu Asn His Tyr																														
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act aat cag aca gat atg cct cac tgc ctt tta tgc aac aac aaa act	1585																													
Thr Asn Gln Thr Asp Met Pro His Cys Leu Leu Cys Asn Asn Lys Thr																														
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cac tgg gcc cct gtt agg agc act atg tgc ttt gaa aag gaa gtg gaa	1633																													
His Trp Ala Pro Val Arg Ser Thr Met Cys Phe Glu Lys Glu Val Glu																														
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Tyr Leu Asn Trp Asn Asp Ser Leu Ala Ile Leu Leu Leu Ile Leu Ser																														
545 550 555																														
cta ctg gga atc ata ttt gtt ctg gtt gtt ggc ata ata ttt aca aga	1729																													
Leu Leu Gly Ile Ile Phe Val Leu Val Val Gly Ile Ile Phe Thr Arg																														
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Asn Leu Asn Thr Pro Val Val Lys Ser Ser Gly Gly Leu Arg Val Cys	
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Tyr Val Ile Leu Leu Cys His Phe Leu Asn Phe Ala Ser Thr Ser Phe	
595 600 605	
ttc att gga gaa cca caa gac ttc aca tgt aaa acc agg cag aca atg	1873
Phe Ile Gly Glu Pro Gln Asp Phe Thr Cys Lys Thr Arg Gln Thr Met	
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Phe Gly Val Ser Phe Thr Leu Cys Ile Ser Cys Ile Leu Thr Lys Ser	
625 630 635	
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Leu Lys Ile Leu Leu Ala Phe Ser Phe Asp Pro Lys Leu Gln Lys Phe	
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Leu Lys Cys Leu Tyr Arg Pro Ile Leu Ile Ile Phe Thr Cys Thr Gly	
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atc cag gtt gtc att tgc aca ctc tgg cta atc ttt gca gca cct act	2065
Ile Gln Val Val Ile Cys Thr Leu Trp Leu Ile Phe Ala Ala Pro Thr	
675 680 685	
gta gag gtg aat gtc tcc ttg ccc aga gtc atc atc ctg gag tgt gag	2113
Val Glu Val Asn Val Ser Leu Pro Arg Val Ile Ile Leu Glu Cys Glu	
690 695 700	
gag gga tcc ata ctt gca ttt ggc acc atg ctg ggc tac att gcc atc	2161
Glu Gly Ser Ile Leu Ala Phe Gly Thr Met Leu Gly Tyr Ile Ala Ile	
705 710 715	
ctg gcc ttc att tgc ttc ata ttt gct ttc aaa ggc aaa tat gag aat	2209
Leu Ala Phe Ile Cys Phe Ile Phe Ala Phe Lys Gly Lys Tyr Glu Asn	
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tac aat gaa gcc aaa ttc att aca ttt ggc atg ctc att tac ttc ata	2257
Tyr Asn Glu Ala Lys Phe Ile Thr Phe Gly Met Leu Ile Tyr Phe Ile	
740 745 750	
gct tgg atc aca ttc atc cct atc tat gct acc aca ttt ggc aaa tat	2305
Ala Trp Ile Thr Phe Ile Pro Ile Tyr Ala Thr Thr Phe Gly Lys Tyr	
755 760 765	
gta cca gct gtg gag att att gtc ata tta ata tct aac tat gga atc	2353
Val Pro Ala Val Glu Ile Ile Val Ile Leu Ile Ser Asn Tyr Gly Ile	
770 775 780	
ctg tat tgc aca ttc atc ccc aaa tgc tat gtt att att tgt aag caa	2401
Leu Tyr Cys Thr Phe Ile Pro Lys Cys Tyr Val Ile Ile Cys Lys Gln	
785 790 795	

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Glu Ile Asn Thr Lys Ser Ala Phe Leu Lys Met Ile Tyr Ser Tyr Ser
800 805 810 815

tcc cat agt gtg agc agc att gcc ctg agt cct gct tca ctg gac tcc 2497
Ser His Ser Val Ser Ser Ile Ala Leu Ser Pro Ala Ser Leu Asp Ser
820 825 830

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Met Ser Gly Asn Val Thr Met Thr Asn Pro Ser Ser Ser Gly Lys Ser
835 840 845

gca acc tgg cag aaa agc aaa gat ctt cag gca caa gca ttt gca cac 2593
Ala Thr Trp Gln Lys Ser Lys Asp Leu Gln Ala Gln Ala Phe Ala His
850 855 860

ata tgc agg gaa aat gcc aca agt gta tct aaa act ttg cct cga aaa 2641
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35 40 45

Asn Ser Phe Phe Ser Phe Ser Trp Gln Val Ile Asn Lys Phe Phe Glu
50 55 60

Ile Ser Val Phe Leu Gln Thr Leu Ala Met Ile His Ser Ile Glu Met
65 70 75 80

Ile Asn Asn Ser Thr Leu Leu Pro Gly Val Lys Leu Gly Tyr Glu Ile
85 90 95

Tyr Asp Thr Cys Thr Glu Val Thr Val Ala Met Ala Ala Thr Leu Arg
100 105 110

Phe Leu Ser Lys Phe Asn Cys Ser Arg Glu Thr Val Glu Phe Lys Cys
115 120 125

Asp Tyr Ser Ser Tyr Met Pro Arg Val Lys Ala Val Ile Gly Ser Gly
130 135 140

Tyr Ser Glu Ile Thr Met Ala Val Ser Arg Met Leu Asn Leu Gln Leu
145 150 155 160
Met Pro Gln Val Gly Tyr Glu Ser Thr Ala Glu Ile Leu Ser Asp Lys
165 170 175
Ile Arg Phe Pro Ser Phe Leu Arg Thr Val Pro Ser Asp Phe His Gln
180 185 190
Ile Lys Ala Met Ala His Leu Ile Gln Lys Ser Gly Trp Asn Trp Ile
195 200 205
Gly Ile Ile Thr Thr Asp Asp Asp Tyr Gly Arg Leu Ala Leu Asn Thr
210 215 220
Phe Ile Ile Gln Ala Glu Ala Asn Asn Val Cys Ile Ala Phe Lys Glu
225 230 235 240
Val Leu Pro Ala Phe Leu Ser Asp Asn Thr Ile Glu Val Arg Ile Asn
245 250 255
Arg Thr Leu Lys Lys Ile Ile Leu Glu Ala Gln Val Asn Val Ile Val
260 265 270
Val Phe Leu Arg Gln Phe His Val Phe Asp Leu Phe Asn Lys Ala Ile
275 280 285
Glu Met Asn Ile Asn Lys Met Trp Ile Ala Ser Asp Asn Trp Ser Thr
290 295 300
Ala Thr Lys Ile Thr Thr Ile Pro Asn Val Lys Lys Ile Gly Lys Val
305 310 315 320
Val Gly Phe Ala Phe Arg Arg Gly Asn Ile Ser Ser Phe His Ser Phe
325 330 335
Leu Gln Asn Leu Ser Glu Ala Lys Ser Arg Asn Ser Lys Phe Thr Ser
340 345 350
Val Phe Phe Ser Leu Pro Glu Ile Ser Gly Lys Ala Ser Cys Val Lys
355 360 365
Ile Cys Leu Lys Leu Ile His Ser Ile Gln Leu Ala Val Phe Ala Leu
370 375 380
Gly Tyr Ala Ile Arg Asp Leu Cys Gln Ala Arg Asp Cys Gln Asn Pro
385 390 395 400
Asn Ala Phe Gln Pro Trp Glu Leu Leu Gly Val Leu Lys Asn Val Thr
405 410 415
Phe Thr Asp Gly Trp Asn Ser Phe His Phe Asp Ala His Gly Asp Leu
420 425 430
Asn Thr Gly Tyr Asp Val Val Leu Trp Lys Glu Ile Asn Gly His Met
435 440 445

Thr	Val	Thr	Lys	Met	Ala	Glu	Tyr	Asp	Leu	Ala	Asn	Ser	Ala	Phe	Ser	
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Phe	Thr	Ala	Arg	Asn	Phe	Lys	Asn	Ile	Ser	Tyr	Ile	Gln	Ser	Lys	Cys	
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Ser	Lys	Glu	Cys	Ser	Pro	Gly	Gln	Met	Lys	Lys	Thr	Thr	Arg	Ser	Gln	
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His	Ile	Cys	Cys	Tyr	Glu	Cys	Gln	Asn	Cys	Pro	Glu	Asn	His	Tyr	Thr	
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Trp	Ala	Pro	Val	Arg	Ser	Thr	Met	Cys	Phe	Glu	Lys	Glu	Val	Glu	Tyr	
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Leu	Asn	Trp	Asn	Asp	Ser	Leu	Ala	Ile	Leu	Leu	Leu	Ile	Leu	Ser	Leu	
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Leu	Gly	Ile	Ile	Phe	Val	Leu	Val	Val	Gly	Ile	Ile	Phe	Thr	Arg	Asn	
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Leu	Asn	Thr	Pro	Val	Val	Lys	Ser	Ser	Gly	Gly	Leu	Arg	Val	Cys	Tyr	
			580					585					590			
Val	Ile	Leu	Leu	Cys	His	Phe	Leu	Asn	Phe	Ala	Ser	Thr	Ser	Phe	Phe	
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Ile	Gly	Glu	Pro	Gln	Asp	Phe	Thr	Cys	Lys	Thr	Arg	Gln	Thr	Met	Phe	
	610					615					620					
Gly	Val	Ser	Phe	Thr	Leu	Cys	Ile	Ser	Cys	Ile	Leu	Thr	Lys	Ser	Leu	
625					630					635					640	
Lys	Ile	Leu	Leu	Ala	Phe	Ser	Phe	Asp	Pro	Lys	Leu	Gln	Lys	Phe	Leu	
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Lys	Cys	Leu	Tyr	Arg	Pro	Ile	Leu	Ile	Ile	Phe	Thr	Cys	Thr	Gly	Ile	
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Gln	Val	Val	Ile	Cys	Thr	Leu	Trp	Leu	Ile	Phe	Ala	Ala	Pro	Thr	Val	
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	690					695					700					
Gly	Ser	Ile	Leu	Ala	Phe	Gly	Thr	Met	Leu	Gly	Tyr	Ile	Ala	Ile	Leu	
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Ala	Phe	Ile	Cys	Phe	Ile	Phe	Ala	Phe	Lys	Gly	Lys	Tyr	Glu	Asn	Tyr	
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Asn	Glu	Ala	Lys	Phe	Ile	Thr	Phe	Gly	Met	Leu	Ile	Tyr	Phe	Ile	Ala	
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Trp Ile Thr Phe Ile Pro Ile Tyr Ala Thr Thr Phe Gly Lys Tyr Val
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 Pro Ala Val Glu Ile Ile Val Ile Leu Ile Ser Asn Tyr Gly Ile Leu
 770 775 780
 Tyr Cys Thr Phe Ile Pro Lys Cys Tyr Val Ile Ile Cys Lys Gln Glu
 785 790 795 800
 Ile Asn Thr Lys Ser Ala Phe Leu Lys Met Ile Tyr Ser Tyr Ser Ser
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 His Ser Val Ser Ser Ile Ala Leu Ser Pro Ala Ser Leu Asp Ser Met
 820 825 830
 Ser Gly Asn Val Thr Met Thr Asn Pro Ser Ser Ser Gly Lys Ser Ala
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 Thr Trp Gln Lys Ser Lys Asp Leu Gln Ala Gln Ala Phe Ala His Ile
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 Lys Ile Lys Asp Leu Asn Val Glu Ser Gln Thr Val Lys Ile Phe Leu
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 cgc tct ctg ttc tac aca gcc ctc ctg gtc ttc agt gcc ctg gga aac 144
 Arg Ser Leu Phe Tyr Thr Ala Leu Leu Val Phe Ser Ala Leu Gly Asn
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 atc ctt gcc ctt tgc ctt acc tgt caa aag agc agg aag atc aac tgc 192
 Ile Leu Ala Leu Cys Leu Thr Cys Gln Lys Ser Arg Lys Ile Asn Cys
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 aca ggc atc tac ctg gtg cac ctg gct gtg tct gac ctg ctg ttc acc 240
 Thr Gly Ile Tyr Leu Val His Leu Ala Val Ser Asp Leu Leu Phe Thr
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gtg gcc tta ccg gga agg gtg gtg tgt tat gtg ctg ggc tcc agc tgg	288
Val Ala Leu Pro Gly Arg Val Val Cys Tyr Val Leu Gly Ser Ser Trp	
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cct ttc ggc aag ggg ctc tgc agg ctg acg gcg ttt gtg ctc tac acc	336
Pro Phe Gly Lys Gly Leu Cys Arg Leu Thr Ala Phe Val Leu Tyr Thr	
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gac acc tac ggg ggg gtc tac ctc atg gcc tgt gtg agc gtg gac cat	384
Asp Thr Tyr Gly Gly Val Tyr Leu Met Ala Cys Val Ser Val Asp His	
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Tyr Pro Ala Val Val Cys Ala His Trp Gly Pro Arg Leu Arg Thr Ala	
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Gly Arg Ala Arg Leu Val Cys Val Ala Ile Trp Thr Leu Val Leu Leu	
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Gln Thr Met Pro Leu Leu Leu Met Pro Met Thr Lys Pro Leu Val Gly	
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Lys Leu Ala Cys Met Glu Tyr Ser Ser Met Glu Ser Val Leu Gly Leu	
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Pro Leu Met Val Leu Val Ala Phe Ala Ile Gly Phe Cys Gly Pro Val	
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Gly Ile Ile Leu Ser Cys Tyr Met Lys Ile Thr Trp Lys Leu Cys Ser	
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Thr Ala Arg Glu Asp Pro Val Thr Ser Arg Lys Gly Arg His Trp Arg	
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Gly Cys Leu Leu Thr Leu Leu Met Leu Val Ala Val Val Val Cys Phe	
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Ser Pro Tyr His Leu Asn Ile Lys Gln Phe Met Ala Arg Gly Met Leu	
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His Leu Pro Ser Cys Ala Glu Arg Arg Ala Phe Leu Leu Ser Leu Gln	
275 280 285	
gcc acc gtg gcc ctc atg aac atg aac tgt ggc att acc cca atc att	912
Ala Thr Val Ala Leu Met Asn Met Asn Cys Gly Ile Thr Pro Ile Ile	
290 295 300	
tac ttc ttt gca tcc acc cat tac agg aaa tgg ctc ctg ggc att tta	960

Tyr Phe Phe Ala Ser Thr His Tyr Arg Lys Trp Leu Leu Gly Ile Leu
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 aag ctc aaa ggg tct tcc tcc tcc tcc tcc tcc tcc tcc tcc acc cca 1008
 Lys Leu Lys Gly Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Thr Pro
 325 330 335
 gga aaa gct tct tca gaa aca cca agt atc acc cag gcc aga ggt tct 1056
 Gly Lys Ala Ser Ser Glu Thr Pro Ser Ile Thr Gln Ala Arg Gly Ser
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 Ile Leu Ala Leu Cys Leu Thr Cys Gln Lys Ser Arg Lys Ile Asn Cys
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 Thr Gly Ile Tyr Leu Val His Leu Ala Val Ser Asp Leu Leu Phe Thr
 65 70 75 80
 Val Ala Leu Pro Gly Arg Val Val Cys Tyr Val Leu Gly Ser Ser Trp
 85 90 95
 Pro Phe Gly Lys Gly Leu Cys Arg Leu Thr Ala Phe Val Leu Tyr Thr
 100 105 110
 Asp Thr Tyr Gly Gly Val Tyr Leu Met Ala Cys Val Ser Val Asp His
 115 120 125
 Tyr Pro Ala Val Val Cys Ala His Trp Gly Pro Arg Leu Arg Thr Ala
 130 135 140
 Gly Arg Ala Arg Leu Val Cys Val Ala Ile Trp Thr Leu Val Leu Leu
 145 150 155 160
 Gln Thr Met Pro Leu Leu Leu Met Pro Met Thr Lys Pro Leu Val Gly
 165 170 175
 Lys Leu Ala Cys Met Glu Tyr Ser Ser Met Glu Ser Val Leu Gly Leu
 180 185 190

Pro Leu Met Val Leu Val Ala Phe Ala Ile Gly Phe Cys Gly Pro Val
 195 200 205
 Gly Ile Ile Leu Ser Cys Tyr Met Lys Ile Thr Trp Lys Leu Cys Ser
 210 215 220
 Thr Ala Arg Glu Asp Pro Val Thr Ser Arg Lys Gly Arg His Trp Arg
 225 230 235 240
 Gly Cys Leu Leu Thr Leu Leu Met Leu Val Ala Val Val Val Cys Phe
 245 250 255
 Ser Pro Tyr His Leu Asn Ile Lys Gln Phe Met Ala Arg Gly Met Leu
 260 265 270
 His Leu Pro Ser Cys Ala Glu Arg Arg Ala Phe Leu Leu Ser Leu Gln
 275 280 285
 Ala Thr Val Ala Leu Met Asn Met Asn Cys Gly Ile Thr Pro Ile Ile
 290 295 300
 Tyr Phe Phe Ala Ser Thr His Tyr Arg Lys Trp Leu Leu Gly Ile Leu
 305 310 315 320
 Lys Leu Lys Gly Ser Ser Ser Ser Ser Ser Ser Ser Ser Thr Pro
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 Ile Ala Met Gly Phe Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu His
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 Tyr Thr Thr Ile Met Cys Gly Asn Ala Cys Val Gly Ile Met Ala Val
 65 70 75 80
 Ala Trp Gly Ile Gly Phe Leu His Ser Val Ser Gln Leu Ala Phe Ala
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Val His Leu Pro Phe Cys Gly Pro Asn Glu Val Asp Ser Phe Tyr Cys
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 Asp Leu Pro Arg Val Ile Lys Leu Ala Cys Thr Asp Thr Tyr Arg Leu
 115 120 125
 Asp Ile Met Val Ile Ala Asn Ser Gly Val Leu Thr Val Cys Ser Phe
 130 135 140
 Val Leu Leu Ile Ile Ser Tyr Thr Ile Ile Leu Met Thr Ile Gln His
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 Cys Pro Leu Asp Lys Ser Ser Lys Ala Leu Ser Thr Leu Thr Ala His
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 Ile Thr Val Val Leu Leu Phe Phe Gly Pro Cys Val Phe Ile Tyr Ala
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 Asn Leu Ser Phe Ile Asp Ile Cys Gln Ser Asn Phe Ala Thr Pro Lys
 65 70 75 80
 Met Leu Val Asp Phe Phe Ile Glu Arg Lys Thr Ile Ser Phe Glu Gly
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 Cys Met Ala Gln Ile Phe Val Leu His Ser Phe Val Gly Ser Glu Met
 100 105 110
 Met Leu Leu Val Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Lys
 115 120 125
 Pro Leu His Tyr Ser Thr Ile Met Asn Arg Arg Leu Cys Val Ile Phe
 130 135 140

Val Ser Ile Ser Trp Ala Val Gly Val Leu His Ser Val Ser His Leu
 145 150 155 160
 Ala Phe Thr Val Asp Leu Pro Phe Cys Gly Pro Asn Glu Val Asp Ser
 165 170 175
 Phe Phe Cys Asp Leu Pro Leu Val Ile Glu Leu Ala Cys Met Asp Thr
 180 185 190
 Tyr Glu Met Glu Ile Met Thr Leu Thr Asn Ser Gly Leu Ile Ser Leu
 195 200 205
 Ser Cys Phe Leu Ala Leu Ile Ile Ser Tyr Thr Ile Ile Leu Ile Gly
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 Val Arg Cys Arg Ser Ser Ser Gly Ser Ser Lys Ala Leu Ser Thr Leu
 225 230 235 240
 Thr Ala His Ile Thr Val Val Ile Leu Phe Phe Gly Pro Cys Ile Tyr
 245 250 255
 Phe Tyr Ile Trp Pro Phe Ser Arg Leu Pro Val Asp Lys Phe Leu Ser
 260 265 270
 Val Phe Tyr Thr Val Cys Thr Pro Leu Leu Asn Pro Ile Ile Tyr Ser
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 35 40 45
 Ile Ser Phe Asp Ser His Leu Asn Ser Pro Met Tyr Phe Leu Leu Ser
 50 55 60
 Asn Leu Ser Phe Ile Asp Ile Cys Gln Ser Asn Phe Ala Thr Pro Lys
 65 70 75 80
 Met Leu Val Asp Phe Phe Ile Glu Arg Lys Thr Ile Ser Phe Glu Gly
 85 90 95

Cys Met Ala Gln Ile Phe Val Leu His Ser Phe Val Gly Ser Glu Met
 100 105 110
 Met Leu Leu Val Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Lys
 115 120 125
 Pro Leu His Tyr Ser Thr Ile Met Asn Arg Arg Leu Cys Val Ile Phe
 130 135 140
 Val Ser Ile Ser Trp Ala Val Gly Val Leu His Ser Val Ser His Leu
 145 150 155 160
 Ala Phe Thr Val Asp Leu Pro Phe Cys Gly Pro Asn Glu Val Asp Ser
 165 170 175
 Phe Phe Cys Asp Leu Pro Leu Val Ile Glu Leu Ala Cys Met Asp Thr
 180 185 190
 Tyr Glu Met Glu Ile Met Thr Leu Thr Asn Ser Gly Leu Ile Ser Leu
 195 200 205
 Ser Cys Phe Leu Ala Leu Ile Ile Ser Tyr Thr Ile Ile Leu Ile Gly
 210 215 220
 Val Arg Cys Arg Ser Ser Ser Gly Ser Ser Lys Ala Leu Ser Thr Leu
 225 230 235 240
 Thr Ala His Ile Thr Val Val Ile Leu Phe Phe Gly Pro Cys Ile Tyr
 245 250 255
 Phe Tyr Ile Trp Pro Phe Ser Arg Leu Pro Val Asp Lys Phe Leu Ser
 260 265 270
 Val Phe Tyr Thr Val Cys Thr Pro Leu Leu Asn Pro Ile Ile Tyr Ser
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 Met Asp Gly Glu Asn His Ser Val Val Ser Glu Phe Leu Phe Leu Gly
 1 5 10 15
 Leu Thr His Ser Trp Glu Ile Gln Leu Leu Leu Leu Val Phe Ser Ser
 20 25 30
 Val Leu Tyr Val Ala Ser Ile Thr Gly Asn Ile Leu Ile Val Phe Ser
 35 40 45

Val Thr Thr Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
50 55 60
Ser Leu Ser Phe Ile Asp Leu Gly Ala Cys Ser Val Thr Ser Pro Lys
65 70 75 80
Met Ile Tyr Asp Leu Phe Arg Lys Arg Lys Val Ile Ser Phe Gly Gly
85 90 95
Cys Ile Ala Gln Ile Phe Phe Ile His Val Ile Gly Gly Val Glu Met
100 105 110
Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Leu Cys Lys
115 120 125
Pro Leu His Tyr Leu Thr Ile Met Ser Pro Arg Met Cys Leu Ser Phe
130 135 140
Leu Ala Val Ala Trp Thr Leu Gly Val Ser His Ser Leu Phe Gln Leu
145 150 155 160
Ala Phe Leu Val Asn Leu Ala Phe Cys Gly Pro Asn Val Leu Asp Ser
165 170 175
Phe Tyr Cys Asp Leu Pro Arg Leu Leu Arg Leu Ala Cys Thr Asp Thr
180 185 190
Tyr Arg Leu Gln Phe Met Val Thr Val Asn Ser Gly Phe Ile Cys Val
195 200 205
Gly Thr Phe Phe Ile Leu Leu Ile Ser Tyr Val Phe Ile Leu Phe Thr
210 215 220
Val Trp Lys His Ser Ser Gly Gly Ser Ser Lys Ala Leu Ser Thr Leu
225 230 235 240
Ser Ala His Ser Thr Val Val Leu Leu Phe Phe Gly Pro Pro Met Phe
245 250 255
Val Tyr Thr Arg Pro His Pro Asn Ser Gln Met Asp Lys Phe Leu Ala
260 265 270
Ile Phe Asp Ala Val Leu Thr Pro Phe Leu Asn Pro Val Val Tyr Thr
275 280 285
Phe Arg Asn Lys Glu Met Lys Ala Ala Ile Lys Arg Val Cys Lys Gln
290 295 300
Leu Val Ile Tyr Lys Arg Ile Ser
305 310

<210> 39
<211> 324
<212> PRT
<213> Homo sapiens

<400> 39

Met	Asn	Glu	Thr	Asn	His	Ser	Arg	Val	Thr	Glu	Phe	Val	Leu	Leu	Gly	1	5	10	15
Leu	Ser	Ser	Ser	Arg	Glu	Leu	Gln	Pro	Phe	Leu	Phe	Leu	Thr	Phe	Ser	20	25	30	
Leu	Leu	Tyr	Leu	Ala	Ile	Leu	Leu	Gly	Asn	Phe	Leu	Ile	Ile	Leu	Thr	35	40	45	
Val	Thr	Ser	Asp	Ser	Arg	Leu	His	Thr	Pro	Met	Tyr	Phe	Leu	Leu	Ala	50	55	60	
Asn	Leu	Ser	Phe	Ile	Asp	Val	Cys	Val	Ala	Ser	Phe	Ala	Thr	Pro	Lys	65	70	75	80
Met	Ile	Ala	Asp	Phe	Leu	Val	Glu	Arg	Lys	Thr	Ile	Ser	Phe	Asp	Ala	85	90	95	
Cys	Leu	Ala	Gln	Ile	Phe	Phe	Val	His	Leu	Phe	Thr	Gly	Ser	Glu	Met	100	105	110	
Val	Leu	Leu	Val	Ser	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Ile	Cys	Lys	115	120	125	
Pro	Leu	His	Tyr	Met	Thr	Val	Met	Ser	Arg	Arg	Val	Cys	Val	Val	Leu	130	135	140	
Val	Leu	Ile	Ser	Trp	Phe	Val	Gly	Phe	Ile	His	Thr	Thr	Ser	Gln	Leu	145	150	155	160
Ala	Phe	Thr	Val	Asn	Leu	Pro	Phe	Cys	Gly	Pro	Asn	Lys	Val	Asp	Ser	165	170	175	
Phe	Phe	Cys	Asp	Leu	Pro	Leu	Val	Thr	Lys	Leu	Ala	Cys	Ile	Asp	Thr	180	185	190	
Tyr	Val	Val	Ser	Leu	Leu	Ile	Val	Ala	Asp	Ser	Gly	Phe	Leu	Ser	Leu	195	200	205	
Ser	Ser	Phe	Leu	Leu	Leu	Val	Val	Ser	Tyr	Thr	Val	Ile	Leu	Val	Thr	210	215	220	
Val	Arg	Asn	Arg	Ser	Ser	Ala	Ser	Met	Ala	Lys	Ala	Arg	Ser	Thr	Leu	225	230	235	240
Thr	Ala	His	Ile	Thr	Val	Val	Thr	Leu	Phe	Phe	Gly	Pro	Cys	Ile	Phe	245	250	255	
Ile	Tyr	Val	Trp	Pro	Phe	Ser	Ser	Tyr	Ser	Val	Asp	Lys	Val	Leu	Ala	260	265	270	
Val	Phe	Tyr	Thr	Ile	Phe	Thr	Leu	Ile	Leu	Asn	Pro	Val	Ile	Tyr	Thr	275	280	285	
Leu	Arg	Asn	Lys	Glu	Val	Lys	Ala	Ala	Met	Ser	Lys	Leu	Lys	Ser	Arg	290	295	300	

Tyr Leu Lys Pro Ser Gln Val Ser Val Val Ile Arg Asn Val Leu Phe
 305 310 315 320

Leu Glu Thr Lys

<210> 40

<211> 254

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artifical Sequence: Domain

<400> 40

Gly Asn Leu Leu Val Ile Leu Val Ile Leu Arg Thr Lys Lys Leu Arg
 1 5 10 15

Thr Pro Thr Asn Ile Phe Leu Leu Asn Leu Ala Val Ala Asp Leu Leu
 20 25 30

Phe Leu Leu Thr Leu Pro Pro Trp Ala Leu Tyr Tyr Leu Val Gly Gly
 35 40 45

Asp Trp Val Phe Gly Asp Ala Leu Cys Lys Leu Val Gly Ala Leu Phe
 50 55 60

Val Val Asn Gly Tyr Ala Ser Ile Leu Leu Leu Thr Ala Ile Ser Ile
 65 70 75 80

Asp Arg Tyr Leu Ala Ile Val His Pro Leu Arg Tyr Arg Arg Ile Arg
 85 90 95

Thr Pro Arg Arg Ala Lys Val Leu Ile Leu Leu Val Trp Val Leu Ala
 100 105 110

Leu Leu Leu Ser Leu Pro Pro Leu Leu Phe Ser Trp Leu Arg Thr Val
 115 120 125

Glu Glu Gly Asn Thr Thr Val Cys Leu Ile Asp Phe Pro Glu Glu Ser
 130 135 140

Val Lys Arg Ser Tyr Val Leu Leu Ser Thr Leu Val Gly Phe Val Leu
 145 150 155 160

Pro Leu Leu Val Ile Leu Val Cys Tyr Thr Arg Ile Leu Arg Thr Leu
 165 170 175

Arg Lys Arg Ala Arg Ser Gln Arg Ser Leu Lys Arg Arg Ser Ser Ser
 180 185 190

Glu Arg Lys Ala Ala Lys Met Leu Leu Val Val Val Val Val Phe Val
 195 200 205

Leu Cys Trp Leu Pro Tyr His Ile Val Leu Leu Leu Asp Ser Leu Cys
 210 215 220

Leu Leu Ser Ile Trp Arg Val Leu Pro Thr Ala Leu Leu Ile Thr Leu
 225 230 235 240

Trp Leu Ala Tyr Val Asn Ser Cys Leu Asn Pro Ile Ile Tyr
 245 250

<210> 41
 <211> 93
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artifical Sequence: Signature Domain

<400> 41
 Gly Ser Thr Ala Leu Ile Val Met Phe Tyr Trp Cys Gly Ser Thr Ala
 1 5 10 15

Asn Cys Pro Asp Glu Glu Asp Pro Lys Arg His Glu Asp Pro Lys Arg
 20 25 30

His Leu Ile Val Met Asn Gln Gly Ala Leu Ile Val Met Asn Gln Gly
 35 40 45

Ala Leu Ile Val Met Phe Thr Gly Ser Thr Ala Asn Cys Leu Ile Val
 50 55 60

Met Phe Tyr Trp Ser Thr Ala Cys Asp Glu Asn His Arg Phe Tyr Trp
 65 70 75 80

Cys Ser His Phe Tyr Trp Cys Ser His Leu Ile Val Met
 85 90

<210> 42
 <211> 307
 <212> PRT
 <213> Rattus norvegicus

<400> 42
 Met Gly Glu Asn Asn Asn Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr
 1 5 10 15

Gln Asp Pro Asp Gly Arg Lys Ala Leu Phe Val Ile Phe Phe Leu Ile
 20 25 30

Tyr Ile Val Thr Met Met Gly Asn Leu Leu Ile Val Val Thr Val Ile
 35 40 45

Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
 50 55 60

Ser Leu Leu Asp Ala Leu Phe Ser Thr Ala Ile Ser Pro Lys Leu Ile
 65 70 75 80

Ala Asp Leu Leu Tyr Asp Gln Lys Thr Ile Ser Phe Arg Ala Cys Met
 85 90 95

Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
 100 105 110
 Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
 115 120 125
 His Tyr Leu Ala Ile Met Asn Arg Arg Val Cys Ile Thr Leu Leu Ile
 130 135 140
 Phe Ala Trp Thr Gly Gly Phe Thr His Ser Leu Ile Gln Ile Val Phe
 145 150 155 160
 Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
 165 170 175
 Cys Asp Met Ser Pro Leu Leu Val Leu Ala Cys Thr Asp Thr Tyr Phe
 180 185 190
 Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Val Asn Cys Ile Val Ile
 195 200 205
 Phe Thr Leu Leu Leu Gly Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
 210 215 220
 Thr Gln Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
 225 230 235 240
 His Ile Leu Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
 245 250 255
 Ala Arg Pro Val Tyr Asn Phe Pro Ile Asp Lys Cys Ile Thr Val Phe
 260 265 270
 Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
 275 280 285
 Asn Ser Glu Ile Lys Ser Cys Met Lys Lys Leu Trp Cys Lys Met Leu
 290 295 300
 His Ala Asp
 305

<210> 43
 <211> 722
 <212> PRT
 <213> Homo sapiens

<400> 43
 Met Val Gly Asn Leu Leu Ile Trp Val Thr Thr Ile Gly Ser Pro Ser
 1 5 10 15
 Leu Gly Ser Leu Met Tyr Phe Phe Leu Ala Tyr Leu Ser Leu Met Asp
 20 25 30
 Ala Ile Tyr Ser Thr Ala Met Ser Pro Lys Leu Met Ile Asp Leu Leu
 35 40 45

Cys Asp Lys Ile Ala Ile Ser Leu Ser Ala Cys Met Gly Gln Leu Phe
50 55 60
Ile Glu His Leu Leu Gly Gly Ala Glu Val Phe Leu Leu Val Val Met
65 70 75 80
Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro Leu His Tyr Leu Asn
85 90 95
Ile Met Asn Arg Leu Val Cys Ile Leu Leu Leu Val Val Ala Met Ile
100 105 110
Gly Gly Phe Val His Ser Val Val Gln Ile Val Phe Leu Tyr Ser Leu
115 120 125
Pro Ile Cys Gly Pro Asn Val Ile Asp His Ser Val Cys Asp Met Tyr
130 135 140
Pro Leu Leu Glu Leu Leu Cys Leu Asp Thr Tyr Phe Ile Gly Leu Thr
145 150 155 160
Val Val Ala Asn Gly Gly Ile Ile Tyr Asp Thr Val Ile Glu Pro Ser
165 170 175
Ala Ala Tyr Phe Val Ile Leu Ser Cys Gln Val Leu Pro Asp Tyr Asp
180 185 190
Glu Ser Cys Glu Ile Ser Glu Val Tyr Lys Tyr Glu Pro Ile Ala Leu
195 200 205
Leu Gln Gly Ser His Leu Leu Gly Pro Lys Lys Lys Leu His Lys Pro
210 215 220
Gly Phe Gly Thr Ser Asp Gln Gly Gly Asp Arg Lys Pro Arg Leu Arg
225 230 235 240
His Leu Ser Pro Thr Pro Ser Glu Glu His Met Lys Asn Lys Asn Asn
245 250 255
Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asn Pro Glu Gly Gln
260 265 270
Lys Val Leu Phe Val Thr Phe Leu Leu Ile Tyr Met Val Thr Ile Met
275 280 285
Gly Asn Leu Leu Ile Ile Val Thr Ile Met Ala Ser Gln Ser Leu Gly
290 295 300
Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu Ser Phe Ile Asp Thr Val
305 310 315 320
Tyr Ser Thr Ala Phe Ala Pro Lys Met Ile Val Asp Leu Leu Ser Glu
325 330 335
Lys Lys Thr Ile Ser Phe Gln Gly Cys Met Ala Gln Leu Phe Met Asp
340 345 350

His Leu Phe Ala Gly Ala Glu Val Ile Leu Leu Val Val Met Ala Tyr
 355 360 365
 Asp Arg Tyr Met Ala Ile Cys Lys Pro Leu His Glu Leu Ile Thr Met
 370 375 380
 Asn Arg Arg Val Cys Val Leu Met Leu Leu Ala Ala Trp Ile Gly Gly
 385 390 395 400
 Phe Leu His Ser Leu Val Gln Phe Leu Phe Ile Tyr Gln Leu Pro Phe
 405 410 415
 Cys Gly Pro Asn Val Ile Asp Asn Phe Leu Cys Asp Leu Tyr Pro Leu
 420 425 430
 Leu Lys Leu Ala Cys Thr Asn Thr Tyr Val Thr Gly Leu Ser Met Ile
 435 440 445
 Ala Asn Gly Gly Ala Ile Cys Ala Val Thr Phe Phe Thr Ile Leu Leu
 450 455 460
 Ser Tyr Gly Val Ile Leu His Ser Leu Lys Thr Gln Ser Leu Glu Gly
 465 470 475 480
 Lys Arg Lys Ala Phe Tyr Thr Cys Ala Ser His Val Thr Val Val Ile
 485 490 495
 Leu Phe Phe Val Pro Cys Ile Phe Leu Tyr Ala Arg Pro Asn Ser Thr
 500 505 510
 Phe Pro Ile Asp Lys Ser Met Thr Val Val Leu Thr Phe Ile Thr Pro
 515 520 525
 Met Leu Asn Pro Leu Ile Tyr Thr Leu Lys Asn Ala Glu Met Lys Ser
 530 535 540
 Ala Met Arg Lys Leu Trp Ser Lys Lys Asp Pro Gly Met Gln Lys Glu
 545 550 555 560
 Leu Phe Val Met Phe Leu Phe Thr Tyr Val Val Thr Val Leu Gly Asn
 565 570 575
 Gln Leu Ile Val Val Thr Ile Ile Ala Ser Pro Ser Leu Gly Ser Pro
 580 585 590
 Met Tyr Phe Phe Leu Ala Cys Leu Ser Phe Ile Asp Ala Ala Tyr Phe
 595 600 605
 Thr Val Ile Ser Pro Lys Leu Ile Val Asp Leu Leu Cys Asp Lys Lys
 610 615 620
 Thr Ile Ser Phe Gln Thr Phe Met Gly Gln Leu Phe Ile Asp His Phe
 625 630 635 640
 Phe Gly Gly Ala Glu Ala Phe Leu Leu Val Val Met Ala Tyr Asp Arg
 645 650 655

Tyr Val Ala Ile Cys Lys Thr Leu His Tyr Leu Thr Ile Met Thr Arg
660 665 670

Gln Val Cys Ile Leu Ala Leu Leu Val Ala Ala Thr Gly Gly Phe Val
675 680 685

His Ser Val Phe Gln Ile Val Val Val Tyr Ser Leu Pro Phe Cys Gly
690 695 700

Ala Asn Val Ile Asp His Phe Ser Cys Asp Met Tyr Pro Leu Leu Glu
705 710 715 720

Leu Ala

<210> 44
<211> 316
<212> PRT
<213> Homo sapiens

<400> 44
Met Gln Asn Gln Ser Phe Val Thr Glu Phe Val Leu Leu Gly Leu Ser
1 5 10 15

Gln Asn Pro Asn Val Gln Glu Ile Val Phe Val Val Phe Leu Phe Val
20 25 30

Tyr Ile Ala Thr Val Gly Gly Asn Met Leu Ile Val Val Thr Ile Leu
35 40 45

Ser Ser Pro Ala Leu Leu Val Ser Pro Met Tyr Phe Phe Leu Gly Phe
50 55 60

Leu Ser Phe Leu Asp Ala Cys Phe Ser Ser Val Ile Thr Pro Lys Met
65 70 75 80

Ile Val Asp Ser Leu Tyr Val Thr Lys Thr Ile Ser Phe Glu Gly Cys
85 90 95

Met Met Gln Leu Phe Ala Glu His Phe Phe Ala Gly Val Glu Val Ile
100 105 110

Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
115 120 125

Leu His Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Ile Leu Met
130 135 140

Gly Val Ala Trp Thr Gly Gly Leu Leu His Ser Met Ile Gln Ile Leu
145 150 155 160

Phe Thr Phe Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Phe
165 170 175

Met Cys Asp Leu Tyr Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr His
180 185 190

Ile Phe Gly Leu Met Val Val Ile Asn Ser Gly Phe Ile Cys Ile Ile
 195 200 205
 Asn Phe Ser Leu Leu Leu Val Ser Tyr Ala Val Ile Leu Leu Ser Leu
 210 215 220
 Arg Thr His Ser Ser Glu Gly Arg Trp Lys Ala Leu Ser Thr Cys Gly
 225 230 235 240
 Ser His Ile Ala Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Val
 245 250 255
 Tyr Thr Arg Pro Pro Ser Ala Phe Ser Leu Asp Lys Met Ala Ala Ile
 260 265 270
 Phe Tyr Ile Ile Leu Asn Pro Leu Leu Asn Pro Leu Ile Tyr Thr Phe
 275 280 285
 Arg Asn Lys Glu Val Lys Gln Ala Met Arg Arg Ile Trp Asn Arg Leu
 290 295 300
 Met Val Val Ser Asp Glu Lys Glu Asn Ile Lys Leu
 305 310 315
 <210> 45
 <211> 308
 <212> PRT
 <213> Mus musculus
 <400> 45
 Met Glu Ile Pro His Asn Ile Thr Glu Phe Phe Met Leu Gly Leu Ser
 1 5 10 15
 Gln Arg Pro Glu Ile Gln Arg Leu Leu Phe Val Val Phe Leu Val Ile
 20 25 30
 Tyr Ala Val Thr Val Cys Gly Asn Met Leu Ile Val Val Thr Val Thr
 35 40 45
 Phe Ser Ser Ser Leu Ala Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu
 50 55 60
 Ser Phe Ile Asp Thr Cys Tyr Ser Ser Ser Leu Ala Pro Lys Leu Ile
 65 70 75 80
 Ala Asp Ser Leu Tyr Glu Gly Thr Thr Leu Ser Tyr Glu Gly Cys Met
 85 90 95
 Ala Gln Leu Phe Gly Ala His Phe Leu Gly Gly Val Glu Ile Ile Leu
 100 105 110
 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
 115 120 125
 His Tyr Thr Thr Thr Met Thr Arg His Leu Cys Val Val Leu Val Ala
 130 135 140

Val Ala Trp Leu Gly Gly Phe Leu His Ser Leu Val Gln Ile Leu Leu
 145 150 155 160
 Ile Phe Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Phe Val
 165 170 175
 Cys Asp Leu Tyr Pro Leu Leu Glu Leu Ala Cys Thr Asn Thr Tyr Val
 180 185 190
 Ile Gly Leu Leu Val Val Ala Asn Ser Gly Val Ile Cys Leu Leu Asn
 195 200 205
 Phe Leu Met Leu Ala Ala Ser Tyr Ile Val Ile Leu His Ser Leu Arg
 210 215 220
 Ser His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ala
 225 230 235 240
 His Phe Thr Val Val Thr Met Phe Phe Val Pro Cys Ile Phe Ser Tyr
 245 250 255
 Met Arg Pro Ser Thr Thr Leu Pro Ile Asp Lys Asn Met Ala Val Phe
 260 265 270
 Tyr Gly Ile Leu Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
 275 280 285
 Asn Glu Glu Val Lys Asp Ala Met Arg Lys Leu Phe Thr Arg Ser Glu
 290 295 300
 Val Val Gly Ala
 305

<210> 46
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 46
 Met Gly Asn Leu Leu Ile Met Val Thr Ile Met Ala Ser Gln Ser Leu
 1 5 10 15
 Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu Ser Phe Ile His Thr
 20 25 30
 Val Tyr Tyr Thr Ala Ile Ala Pro Lys Met Ile Val Asp Leu Leu Ser
 35 40 45
 Glu Lys Lys Thr Ile Ser Phe Gln Gly Cys Met Ala Gln Leu Phe Met
 50 55 60
 Asp His Leu Phe Ala Gly Ala Glu Val Ile Leu Leu Val Val Met Ala
 65 70 75 80
 Tyr Asp Gln Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Leu Ile Ile
 85 90 95

Met Asn Arg Arg Val Cys Val Leu Met Leu Leu Val Ala Trp Ile Gly
 100 105 110
 Gly Phe Leu His Ser Leu Val Gln Phe Leu Phe Ile Tyr Gln Leu Pro
 115 120 125
 Phe Cys Gly Pro Asn Val Ile Asp Asn Phe Leu Cys Asp Leu Tyr Pro
 130 135 140
 Leu Leu Lys Leu Ala Cys Thr Asn Thr Tyr Val Thr Gly Leu Ser Met
 145 150 155 160
 Ile Ala Asn Gly Gly Ala Ile Cys Thr Val Thr Phe Phe Pro Leu Leu
 165 170 175
 Leu Ser Tyr Gly Val Ile Leu Pro Ser Leu Lys Thr Gln Ser Leu Glu
 180 185 190
 Gly Lys Cys Lys Ala Phe Tyr Thr Cys Ala Ser His Ile Thr Val Ile
 195 200 205
 Thr Leu Phe Phe Val Pro Cys Ile Phe Leu Phe Ala Arg Pro Asn Ser
 210 215 220
 Thr Phe Pro Ile Asp Lys Ser Met Thr Val Val Leu Thr Cys Ile Thr
 225 230 235 240
 Pro Met Leu Lys Pro Leu Ile Tyr Ala Leu Arg Asn Ala Glu Met Lys
 245 250 255
 Ser Ala Met Arg Lys Leu Trp Ser Lys Lys Val Ser Leu Ala Gly Lys
 260 265 270
 Gly Leu Tyr Pro Ser
 275

<210> 47
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 47
 Met Gly Leu Asn Thr Ser Ala Ser Thr Phe Gln Leu Thr Gly Phe Pro
 1 5 10 15
 Gly Met Glu Lys Ala His His Trp Ile Phe Ile Pro Leu Leu Ala Ala
 20 25 30
 Tyr Ile Ser Ile Leu Leu Gly Ser Gly Thr Leu Leu Phe Leu Ile Arg
 35 40 45
 Asn Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu
 50 55 60
 Ala Ala Thr Asp Leu Gly Val Thr Leu Thr Thr Met Pro Thr Val Leu
 65 70 75 80

Gly Val Leu Trp Leu Asp His Arg Glu Thr Gly His Gly Ala Cys Phe
 85 90 95
 Ser Gln Ala Tyr Phe Ile His Thr Leu Ser Val Met Glu Ser Gly Val
 100 105 110
 Leu Leu Ala Met Ala Tyr Asp Cys Phe Ile Ala Ile His Asn Pro Leu
 115 120 125
 Arg Tyr Ile Ser Ile Leu Thr Asn Thr Gln Val Met Lys Ile Gly Val
 130 135 140
 Gly Val Leu Thr Arg Ala Gly Leu Ser Ile Met Pro Ile Val Val Arg
 145 150 155 160
 Leu His Trp Phe Pro Tyr Cys Arg Ala His Val Phe Ser His Ala Phe
 165 170 175
 Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp Ile Thr Leu
 180 185 190
 Asn Arg Leu Tyr Pro Val Val Val Leu Phe Ala Met Val Leu Leu Asp
 195 200 205
 Phe Leu Ile Ile Phe Phe Ser Tyr Ile Leu Ile Leu Lys Thr Val Met
 210 215 220
 Gly Ile Gly Ser Gly Gly Glu Arg Ala Lys Ala Leu Asn Thr Cys Val
 225 230 235 240
 Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val Val Cys Leu
 245 250 255
 Thr Phe Ile His Arg Phe Gly Lys His Val Pro His Val Val His Ile
 260 265 270
 Thr Met Arg Tyr Ile His Phe Leu Phe Pro Pro Phe Met Asn Pro Phe
 275 280 285
 Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Ser Gly Ile Leu Arg Leu
 290 295 300
 Phe Ser Leu Pro His Ser Arg Ala
 305 310

<210> 48
 <211> 315
 <212> PRT
 <213> Mus musculus

<400> 48
 Met Pro Ser Met Trp Leu Asn Ile Ser Ser Ser Pro Phe Leu Leu Thr
 1 5 10 15
 Gly Phe Pro Gly Leu Glu Lys Ala His His Leu Ile Ser Leu Pro Leu
 20 25 30

Leu Met Ala Tyr Ile Ser Ile Leu Leu Gly Asn Gly Thr Leu Leu Phe
 35 40 45
 Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu
 50 55 60
 Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr Thr Met Pro
 65 70 75 80
 Thr Val Leu Ser Val Leu Trp Leu Asn His Arg Glu Ile Gly His Gly
 85 90 95
 Ala Cys Phe Ser Gln Ala Tyr Phe Ile His Thr Leu Ser Ile Val Glu
 100 105 110
 Ser Gly Val Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg
 115 120 125
 Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asp Thr Lys Val Ile Lys
 130 135 140
 Ile Gly Ile Gly Leu Val Met Arg Ala Gly Leu Ser Ile Met Pro Ile
 145 150 155 160
 Ile Ile Arg Leu His Trp Phe Pro Tyr Cys Arg Ser His Val Leu Ser
 165 170 175
 His Ala Phe Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp
 180 185 190
 Ile Thr Phe Asn Arg Leu Tyr Pro Val Val Val Val Phe Ala Met Val
 195 200 205
 Leu Leu Asp Phe Leu Ile Ile Phe Phe Ser Tyr Val Leu Ile Leu Lys
 210 215 220
 Thr Val Met Gly Ile Ala Ser Thr Asp Glu Arg Ala Lys Ala Leu Asn
 225 230 235 240
 Thr Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val
 245 250 255
 Val Gly Leu Thr Phe Ile His Arg Phe Gly Lys Asn Val Pro His Val
 260 265 270
 Val His Ile Thr Met Ser Tyr Ile Tyr Phe Leu Phe Pro Pro Phe Met
 275 280 285
 Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Ser Gly Leu
 290 295 300
 Leu Arg Leu Phe Ser Leu Pro Cys Ser Lys Thr
 305 310 315

<210> 49
 <211> 307
 <212> PRT

<213> Mus musculus

<400> 49

Met	Trp	Ser	Asn	Ile	Ser	Ala	Ala	Pro	Phe	Leu	Leu	Thr	Gly	Phe	Pro
1				5					10					15	
Gly	Leu	Glu	Ala	Ala	His	His	Trp	Ile	Ser	Ile	Pro	Phe	Phe	Ala	Ile
			20					25					30		
Tyr	Ile	Ser	Val	Leu	Leu	Gly	Asn	Gly	Thr	Leu	Leu	Tyr	Leu	Ile	Lys
		35					40					45			
Asp	Asp	His	Asn	Leu	His	Glu	Pro	Met	Tyr	Tyr	Phe	Leu	Ala	Met	Leu
	50					55					60				
Ala	Gly	Thr	Asp	Leu	Thr	Val	Thr	Leu	Thr	Thr	Met	Pro	Thr	Val	Met
65					70					75					80
Ala	Val	Leu	Trp	Val	Asn	His	Arg	Glu	Ile	Arg	His	Gly	Ala	Cys	Phe
				85					90					95	
Leu	Gln	Ala	Tyr	Ile	Ile	His	Ser	Leu	Ser	Ile	Val	Glu	Ser	Gly	Val
		100						105					110		
Leu	Leu	Ala	Met	Ser	Tyr	Asp	Arg	Phe	Val	Ala	Ile	Cys	Thr	Pro	Leu
		115					120					125			
His	Tyr	Asn	Ser	Ile	Leu	Thr	Asn	Ser	Arg	Val	Ile	Ala	Ile	Gly	Leu
	130					135					140				
Gly	Val	Val	Leu	Arg	Gly	Phe	Leu	Ser	Leu	Val	Pro	Pro	Ile	Leu	Pro
145					150					155					160
Leu	Phe	Trp	Phe	Ser	Tyr	Cys	Arg	Ser	His	Val	Leu	Ser	His	Ala	Phe
			165						170					175	
Cys	Leu	His	Gln	Asp	Val	Met	Lys	Leu	Ala	Cys	Ala	Asp	Ile	Thr	Phe
		180						185					190		
Asn	Arg	Ile	Tyr	Pro	Val	Val	Leu	Val	Ala	Leu	Thr	Phe	Phe	Leu	Asp
		195					200					205			
Ala	Leu	Ile	Ile	Val	Phe	Ser	Tyr	Val	Leu	Ile	Leu	Lys	Thr	Val	Met
	210					215					220				
Gly	Ile	Ala	Ser	Gly	Glu	Glu	Arg	Ala	Lys	Ala	Leu	Asn	Thr	Cys	Val
225					230					235					240
Ser	His	Ile	Ser	Cys	Val	Leu	Val	Phe	Tyr	Ile	Thr	Val	Ile	Gly	Leu
			245						250					255	
Thr	Phe	Ile	His	Arg	Phe	Gly	Lys	Asn	Ala	Pro	His	Val	Val	His	Ile
			260					265					270		
Thr	Met	Ser	Tyr	Val	Tyr	Phe	Leu	Phe	Pro	Pro	Phe	Met	Asn	Pro	Ile
		275					280					285			

Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Val Leu His Leu
 290 295 300

Leu Ser Val
 305

<210> 50
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 50
 Met Trp Pro Asn Ile Thr Ala Ala Pro Phe Leu Leu Thr Gly Phe Pro
 1 5 10 15

Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala Val
 20 25 30

Tyr Val Cys Ile Leu Leu Gly Asn Gly Met Leu Leu Tyr Leu Ile Lys
 35 40 45

His Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Thr Met Leu
 50 55 60

Ala Gly Thr Asp Leu Met Val Thr Leu Thr Thr Met Pro Thr Val Met
 65 70 75 80

Gly Ile Leu Trp Val Asn His Arg Glu Ile Ser Ser Val Gly Cys Phe
 85 90 95

Leu Gln Ala Tyr Phe Ile His Ser Leu Ser Val Val Glu Ser Gly Ser
 100 105 110

Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg Asn Pro Leu
 115 120 125

Arg Tyr Ala Ser Ile Phe Thr Asn Thr Arg Val Ile Ala Leu Gly Val
 130 135 140

Gly Val Phe Leu Arg Gly Phe Val Ser Ile Leu Pro Val Ile Leu Arg
 145 150 155 160

Leu Phe Ser Phe Ser Tyr Cys Lys Ser His Val Ile Thr Arg Ala Phe
 165 170 175

Cys Leu His Gln Glu Ile Met Arg Leu Ala Cys Ala Asp Ile Thr Phe
 180 185 190

Asn Arg Leu Tyr Pro Val Ile Leu Ile Ser Leu Thr Ile Phe Leu Asp
 195 200 205

Ser Leu Ile Ile Leu Phe Ser Tyr Ile Leu Ile Leu Asn Thr Val Ile
 210 215 220

Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys Ile
 225 230 235 240

Ser His Ile Ser Cys Val Leu Ile Phe Tyr Val Thr Val Met Gly Leu
 245 250 255
 Thr Phe Ile Tyr Arg Phe Gly Lys Asn Val Pro Glu Val Val His Ile
 260 265 270
 Ile Met Ser Tyr Ile Tyr Phe Leu Phe Pro Pro Leu Met Asn Pro Val
 275 280 285
 Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Tyr Gly Ile Ile Arg Leu
 290 295 300
 Leu Ser Lys His Arg Phe Ser Arg
 305 310

 <210> 51
 <211> 312
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (276)..(276)
 <223> Wherein Xaa may be any naturally occurring amino acid

 <400> 51
 Met Trp Pro Asn Ile Thr Ala Ala Pro Phe Leu Leu Thr Gly Phe Pro
 1 5 10 15
 Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala Val
 20 25 30
 Tyr Val Cys Ile Leu Leu Gly Asn Gly Met Leu Leu Tyr Leu Ile Lys
 35 40 45
 His Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Thr Met Leu
 50 55 60
 Ala Gly Thr Asp Leu Met Val Thr Leu Thr Thr Met Pro Thr Val Met
 65 70 75 80
 Gly Ile Leu Trp Val Asn His Arg Glu Ile Ser Ser Val Gly Cys Phe
 85 90 95
 Leu Gln Ala Tyr Phe Ile His Ser Leu Ser Val Val Glu Ser Gly Ser
 100 105 110
 Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg Asn Pro Leu
 115 120 125
 Arg Tyr Ala Ser Ile Phe Thr Asn Thr Arg Val Ile Ala Leu Gly Val
 130 135 140
 Gly Val Phe Leu Arg Gly Phe Val Ser Ile Leu Pro Val Ile Leu Arg
 145 150 155 160
 Leu Phe Ser Phe Ser Tyr Cys Lys Ser His Val Ile Thr Arg Ala Phe

	165		170		175
Cys Leu His	Gln Glu Ile Met Arg	Leu Ala Cys Ala Asp	Ile Thr Phe		
	180		185		190
Asn Arg Leu Tyr Pro Val Ile	Leu Ile Ser Leu Thr	Ile Phe Leu Asp			
	195		200		205
Ser Leu Ile Ile Leu Phe Ser Tyr Ile	Leu Ile Leu Asn Thr Val Ile				
	210		215		220
Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys Ile					
	225		230		235
Ser His Ile Ser Cys Val Leu Ile Phe Tyr Val Thr Val Met Gly Leu					
	245		250		255
Thr Phe Ile Tyr Arg Phe Gly Lys Asn Val Pro Glu Val Val His Ile					
	260		265		270
Ile Met Ser Xaa Ile Tyr Phe Leu Phe Pro Pro Leu Met Asn Pro Val					
	275		280		285
Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Tyr Gly Ile Ile Arg Leu					
	290		295		300
Leu Ser Lys His Arg Phe Ser Arg					
	305		310		
<210> 52					
<211> 252					
<212> PRT					
<213> Homo sapiens					
<400> 52					
Gly Ser Gly Thr Leu Leu Phe Leu Ile Arg Asn Asp His Asn Leu His					
1		5		10	15
Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu Ala Ala Thr Asp Leu Gly					
	20		25		30
Val Thr Leu Thr Thr Met Pro Thr Val Leu Gly Val Leu Trp Leu Asp					
	35		40		45
His Arg Glu Thr Gly His Gly Ala Cys Phe Ser Gln Ala Tyr Phe Ile					
	50		55		60
His Thr Leu Ser Val Met Glu Ser Gly Val Leu Leu Ala Met Ala Tyr					
	65		70		75
Asp Cys Phe Ile Ala Ile His Asn Pro Leu Arg Tyr Ile Ser Ile Leu					
	85		90		95
Thr Asn Thr Gln Val Met Lys Ile Gly Val Gly Val Leu Thr Arg Ala					
	100		105		110
Gly Leu Ser Ile Met Pro Ile Val Val Arg Leu His Trp Phe Pro Tyr					

115	120	125
Cys Arg Ala His Val Phe Ser His Ala Phe Cys Leu His Gln Asp Val		
130	135	140
Ile Lys Leu Ala Cys Ala Asp Ile Thr Leu Asn Arg Leu Tyr Pro Val		
145	150	155 160
Val Val Leu Phe Ala Met Val Leu Leu Asp Phe Leu Ile Ile Phe Phe		
	165	170 175
Ser Tyr Ile Leu Ile Leu Lys Thr Val Met Gly Ile Gly Ser Gly Gly		
	180	185 190
Glu Arg Ala Lys Ala Leu Asn Thr Cys Val Ser His Ile Cys Cys Ile		
	195	200 205
Leu Val Phe Tyr Val Thr Val Val Cys Leu Thr Phe Ile His Arg Phe		
	210	215 220
Gly Lys His Val Pro His Val Val His Ile Thr Met Arg Tyr Ile His		
225	230	235 240
Phe Leu Phe Pro Pro Phe Met Asn Pro Phe Ile Tyr		
	245	250
<210> 53		
<211> 312		
<212> PRT		
<213> Homo sapiens		
<400> 53		
Met Ser Ser Ser Ser Ser Ser His Pro Phe Leu Leu Thr Gly Phe Pro		
1	5	10 15
Gly Leu Glu Glu Ala His His Trp Ile Ser Val Phe Phe Leu Phe Met		
	20	25 30
Tyr Ile Ser Ile Leu Phe Gly Asn Gly Thr Leu Leu Leu Leu Ile Lys		
	35	40 45
Glu Asp His Asn Leu His Glu Pro Met Tyr Phe Phe Leu Ala Met Leu		
	50	55 60
Ala Ala Thr Asp Leu Gly Leu Ala Leu Thr Thr Met Pro Thr Val Leu		
65	70	75 80
Gly Val Leu Trp Leu Asp His Arg Glu Ile Gly Ser Ala Ala Cys Phe		
	85	90 95
Ser Gln Ala Tyr Phe Ile His Ser Leu Ser Phe Leu Glu Ser Gly Ile		
	100	105 110
Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu		
	115	120 125
Arg Tyr Thr Ser Val Leu Thr Asn Thr Arg Val Val Lys Ile Gly Leu		

130	135	140
Gly Val Leu Met Arg Gly Phe Val Ser Val Val Pro Pro Ile Arg Pro		
145	150	155 160
Leu Tyr Phe Phe Leu Tyr Cys His Ser His Val Leu Ser His Ala Phe		
	165	170 175
Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp Thr Thr Phe		
	180	185 190
Asn Arg Leu Tyr Pro Ala Val Leu Val Val Phe Ile Phe Val Leu Asp		
	195	200 205
Tyr Leu Ile Ile Phe Ile Ser Tyr Val Leu Ile Leu Lys Thr Val Leu		
	210	215 220
Ser Ile Ala Ser Arg Glu Glu Arg Ala Lys Ala Leu Ile Thr Cys Val		
	225	230 235 240
Ser His Ile Cys Cys Val Leu Val Phe Tyr Val Thr Val Ile Gly Leu		
	245	250 255
Ser Leu Ile His Arg Phe Gly Lys Gln Val Pro His Ile Val His Leu		
	260	265 270
Ile Met Ser Tyr Ala Tyr Phe Leu Phe Pro Pro Leu Met Asn Pro Ile		
	275	280 285
Thr Tyr Ser Val Lys Thr Lys Gln Ile Gln Asn Ala Ile Leu His Leu		
	290	295 300
Phe Thr Thr His Arg Ile Gly Thr		
305	310	

<210> 54
 <211> 315
 <212> PRT
 <213> Mus musculus

<400> 54
 Met Pro Ser Met Trp Leu Asn Ile Ser Ser Ser Pro Phe Leu Leu Thr
 1 5 10 15
 Gly Phe Pro Gly Leu Glu Lys Ala His His Leu Ile Ser Leu Pro Leu
 20 25 30
 Leu Met Ala Tyr Ile Ser Ile Leu Leu Gly Asn Gly Thr Leu Leu Phe
 35 40 45
 Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu
 50 55 60
 Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr Thr Met Pro
 65 70 75 80
 Thr Val Leu Ser Val Leu Trp Leu Asn His Arg Glu Ile Gly His Gly

35					40					45									
Asp	Asp	His	Asn	Leu	His	Glu	Pro	Met	Tyr	Tyr	Phe	Leu	Ala	Met	Leu				
50					55					60									
Ala	Gly	Thr	Asp	Leu	Thr	Val	Thr	Leu	Thr	Thr	Met	Pro	Thr	Val	Met				
65					70					75					80				
Ala	Val	Leu	Trp	Val	Asn	His	Arg	Glu	Ile	Arg	His	Gly	Ala	Cys	Phe				
85					90					95									
Leu	Gln	Ala	Tyr	Ile	Ile	His	Ser	Leu	Ser	Ile	Val	Glu	Ser	Gly	Val				
100					105					110									
Leu	Leu	Ala	Met	Ser	Tyr	Asp	Arg	Phe	Val	Ala	Ile	Cys	Thr	Pro	Leu				
115					120					125									
His	Tyr	Asn	Ser	Ile	Leu	Thr	Asn	Ser	Arg	Val	Ile	Ala	Ile	Gly	Leu				
130					135					140									
Gly	Val	Val	Leu	Arg	Gly	Phe	Leu	Ser	Leu	Val	Pro	Pro	Ile	Leu	Pro				
145					150					155					160				
Leu	Phe	Trp	Phe	Ser	Tyr	Cys	Arg	Ser	His	Val	Leu	Ser	His	Ala	Phe				
165					170					175									
Cys	Leu	His	Gln	Asp	Val	Met	Lys	Leu	Ala	Cys	Ala	Asp	Ile	Thr	Phe				
180					185					190									
Asn	Arg	Ile	Tyr	Pro	Val	Val	Leu	Val	Ala	Leu	Thr	Phe	Phe	Leu	Asp				
195					200					205									
Ala	Leu	Ile	Ile	Val	Phe	Ser	Tyr	Val	Leu	Ile	Leu	Lys	Thr	Val	Met				
210					215					220									
Gly	Ile	Ala	Ser	Gly	Glu	Glu	Arg	Ala	Lys	Ala	Leu	Asn	Thr	Cys	Val				
225					230					235					240				
Ser	His	Ile	Ser	Cys	Val	Leu	Val	Phe	Tyr	Ile	Thr	Val	Ile	Gly	Leu				
245					250					255									
Thr	Phe	Ile	His	Arg	Phe	Gly	Lys	Asn	Ala	Pro	His	Val	Val	His	Ile				
260					265					270									
Thr	Met	Ser	Tyr	Val	Tyr	Phe	Leu	Phe	Pro	Pro	Phe	Met	Asn	Pro	Ile				
275					280					285									
Ile	Tyr	Ser	Ile	Lys	Thr	Lys	Gln	Ile	Gln	Arg	Ser	Val	Leu	His	Leu				
290					295					300									
Leu	Ser	Val																	
305																			

<210> 56
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 56

Met	Gly	Leu	Asn	Thr	Ser	Ala	Ser	Thr	Phe	Gln	Leu	Thr	Gly	Phe	Pro
1				5					10					15	
Gly	Met	Glu	Lys	Ala	His	His	Trp	Ile	Phe	Ile	Pro	Leu	Leu	Ala	Ala
			20					25					30		
Tyr	Ile	Ser	Ile	Leu	Leu	Gly	Ser	Gly	Thr	Leu	Leu	Phe	Leu	Ile	Arg
		35					40					45			
Asn	Asp	His	Asn	Leu	His	Glu	Pro	Met	Tyr	Tyr	Phe	Leu	Ala	Met	Leu
	50					55					60				
Ala	Ala	Thr	Asp	Leu	Gly	Val	Thr	Leu	Thr	Thr	Met	Pro	Thr	Val	Leu
65					70				75						80
Gly	Val	Leu	Trp	Leu	Asp	His	Arg	Glu	Thr	Gly	His	Gly	Ala	Cys	Phe
				85					90					95	
Ser	Gln	Ala	Tyr	Phe	Ile	His	Thr	Leu	Ser	Val	Met	Glu	Ser	Gly	Val
		100						105					110		
Leu	Leu	Ala	Met	Ala	Tyr	Asp	Cys	Phe	Ile	Ala	Ile	His	Asn	Pro	Leu
		115					120					125			
Arg	Tyr	Ile	Ser	Ile	Leu	Thr	Asn	Thr	Gln	Val	Met	Lys	Ile	Gly	Val
	130					135					140				
Gly	Val	Leu	Thr	Arg	Ala	Gly	Leu	Ser	Ile	Met	Pro	Ile	Val	Val	Arg
145					150					155					160
Leu	His	Trp	Phe	Pro	Tyr	Cys	Arg	Ala	His	Val	Phe	Ser	His	Ala	Phe
			165						170					175	
Cys	Leu	His	Gln	Asp	Val	Ile	Lys	Leu	Ala	Cys	Ala	Asp	Ile	Thr	Leu
			180					185					190		
Asn	Arg	Leu	Tyr	Pro	Val	Val	Val	Leu	Phe	Ala	Met	Val	Leu	Leu	Asp
		195					200					205			
Phe	Leu	Ile	Ile	Phe	Phe	Ser	Tyr	Ile	Leu	Ile	Leu	Lys	Thr	Val	Met
	210					215					220				
Gly	Ile	Gly	Ser	Gly	Gly	Glu	Arg	Ala	Lys	Ala	Leu	Asn	Thr	Cys	Val
225					230					235					240
Ser	His	Ile	Cys	Cys	Ile	Leu	Val	Phe	Tyr	Val	Thr	Val	Val	Cys	Leu
			245						250					255	
Thr	Phe	Ile	His	Arg	Phe	Gly	Lys	His	Val	Pro	His	Val	Val	His	Ile
			260					265					270		
Thr	Met	Arg	Tyr	Ile	His	Phe	Leu	Phe	Pro	Pro	Phe	Met	Asn	Pro	Phe
		275					280					285			
Ile	Tyr	Ser	Ile	Lys	Thr	Lys	Gln	Ile	Gln	Ser	Gly	Ile	Leu	Arg	Leu

290	295	300
Phe Ser Leu Pro His Ser Arg Ala		
305	310	
<210> 57		
<211> 311		
<212> PRT		
<213> Homo sapiens		
<400> 57		
Met Trp Pro Asn Ser Ser Asp Ala Pro Phe Leu Leu Thr Gly Phe Leu		
1	5	10 15
Gly Leu Glu Met Ile His His Trp Ile Ser Ile Pro Phe Phe Val Ile		
	20	25 30
Tyr Phe Ser Ile Ile Val Gly Asn Gly Thr Leu Leu Phe Ile Ile Trp		
	35	40 45
Ser Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Val Leu		
	50	55 60
Ala Ser Met Asp Leu Gly Met Thr Leu Thr Thr Met Pro Thr Val Leu		
	65	70 75 80
Gly Val Leu Val Leu Asn Gln Arg Glu Ile Val His Gly Ala Cys Phe		
	85	90 95
Ile Gln Ser Tyr Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Val		
	100	105 110
Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu		
	115	120 125
His Tyr Asn Ser Ile Leu Thr Asn Ser Arg Val Met Lys Met Ala Leu		
	130	135 140
Gly Ala Leu Leu Arg Gly Phe Val Ser Ile Val Pro Pro Ile Met Pro		
	145	150 155 160
Leu Phe Trp Phe Pro Tyr Cys His Ser His Val Leu Ser His Ala Phe		
	165	170 175
Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe		
	180	185 190
Asn Leu Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp		
	195	200 205
Ala Leu Ile Ile Ile Phe Ser Tyr Val Leu Ile Leu Lys Lys Val Met		
	210	215 220
Gly Ile Ala Ser Gly Glu Glu Arg Lys Lys Ser Leu Asn Thr Cys Val		
	225	230 235 240
Ser His Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu		

	245		250		255
Thr Phe Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile	260		265		270
Thr Met Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile	275		280		285
Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Ile Leu Arg Leu	290		295		300
Leu Ser Lys His Ser Arg Thr	305		310		
<210> 58					
<211> 324					
<212> PRT					
<213> Mus musculus					
<400> 58					
Met Ser Leu Phe Pro Gln Arg Asn Leu Asp Ala Met Asn Arg Ser Ala	1	5	10		15
Ala His Val Thr Glu Phe Val Leu Leu Gly Phe Pro Gly Ser Trp Lys	20		25		30
Ile Gln Ile Phe Leu Phe Val Leu Phe Leu Val Phe Tyr Val Leu Thr	35		40		45
Leu Leu Gly Asn Gly Ala Ile Ile Cys Ala Val Arg Cys Asp Ser Arg	50		55		60
Leu His Thr Pro Met Tyr Phe Leu Leu Gly Asn Phe Ser Phe Leu Glu	65		70		75
Ile Trp Tyr Val Ser Ser Thr Ile Pro Asn Ile Leu Ala Asn Ile Leu	85		90		95
Ser Lys Thr Lys Ala Ile Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr	100		105		110
Phe Phe Phe Ser Leu Gly Thr Thr Glu Cys Leu Phe Leu Ala Val Met	115		120		125
Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu His Tyr Pro Thr	130		135		140
Ile Met Thr Arg Arg Leu Cys Cys Ile Leu Val Ser Ser Cys Trp Leu	145		150		155
Ile Gly Phe Leu Gly Tyr Pro Ile Pro Ile Phe Ser Ile Ser Gln Leu	165		170		175
Pro Phe Cys Gly Ser Asn Ile Ile Asp His Phe Leu Cys Asp Met Asp	180		185		190
Pro Leu Met Ala Leu Ser Cys Ala Pro Ala Pro Ile Thr Glu Phe Ile					

195					200					205					
Phe	Tyr	Ala	Gln	Ser	Ser	Phe	Val	Leu	Phe	Phe	Thr	Ile	Ala	Tyr	Ile
210						215					220				
Leu	Arg	Ser	Tyr	Ile	Leu	Leu	Leu	Arg	Ala	Val	Phe	Gln	Val	Pro	Ser
225					230					235					240
Ala	Ala	Gly	Arg	Arg	Lys	Ala	Phe	Ser	Thr	Cys	Gly	Ser	His	Leu	Val
				245					250					255	
Val	Val	Ser	Leu	Phe	Tyr	Gly	Thr	Val	Met	Val	Met	Tyr	Val	Ser	Pro
			260					265					270		
Thr	Tyr	Gly	Ile	Pro	Ile	Leu	Met	Gln	Lys	Ile	Leu	Thr	Leu	Val	Tyr
		275					280					285			
Ser	Val	Met	Thr	Pro	Leu	Phe	Asn	Pro	Leu	Ile	Tyr	Ser	Leu	Arg	Asn
	290					295					300				
Lys	Asp	Met	Lys	Leu	Ala	Leu	Arg	Asn	Val	Leu	Leu	Gly	Met	Arg	Ile
305					310					315					320
Val	Lys	Asn	Met												

<210> 59
 <211> 408
 <212> PRT
 <213> Rattus sp.

<400> 59
 Met Glu Asn Val Lys Leu Ala Gly Lys Ile Gly Ser Ala Ala Thr Thr
 1 5 10 15

Lys Met Ala Lys Lys Gln Arg Asp Ser Thr Leu Ser Ser Gly Thr Ile
 20 25 30

Arg Glu Gly Leu Ser Gly Asp Asn Pro Thr Ile Lys Pro Ile Leu Leu
 35 40 45

Val Phe Pro Glu Ser Arg Leu Gln Ser Ala Ser Ala Tyr Ala Lys Lys
 50 55 60

Arg Glu Thr Thr Pro Ala Ser Gly Asn Ser Phe Ser Gln Gly Leu Leu
 65 70 75 80

His Ile Ala His Cys His Ser Arg Val Gln Arg Arg Tyr Cys His Lys
 85 90 95

Gly Met Thr Lys Asn Gln Thr Trp Val Thr Glu Phe Ile Leu Leu Gly
 100 105 110

Phe Pro Leu Ser Leu Arg Ile Gln Met Leu Leu Ser Gly Leu Phe Ser
 115 120 125

Leu Leu Tyr Val Phe Thr Leu Leu Gly Asn Gly Ala Ile Leu Gly Leu

130		135		140
Ile Trp Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser				
145		150		155 160
His Leu Ala Ile Ile Asp Ile Ser Tyr Ala Ser Asn Asn Val Pro Lys				
	165		170	175
Met Leu Thr Asn Leu Gly Leu Asn Lys Arg Lys Thr Ile Ser Phe Val				
	180		185	190
Pro Cys Thr Met Gln Thr Phe Leu Tyr Met Ala Phe Ala His Thr Glu				
	195		200	205
Cys Leu Ile Leu Val Met Met Ser Tyr Asp Arg Tyr Met Ala Ile Cys				
	210		215	220
His Pro Leu Gln Tyr Ser Val Ile Met Arg Trp Gly Val Cys Thr Val				
	225		230	235 240
Leu Ala Val Thr Ser Trp Ala Cys Gly Ser Leu Leu Ala Leu Val His				
	245		250	255
Val Val Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Ile Asn				
	260		265	270
His Phe Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp				
	275		280	285
Thr Trp Leu Asn Gln Val Val Ile Phe Ala Ala Ser Val Phe Ile Leu				
	290		295	300
Val Gly Pro Leu Cys Leu Val Leu Val Ser Tyr Ser Arg Ile Leu Ala				
	305		310	315 320
Ala Ile Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser				
	325		330	335
Thr Cys Ser Ser His Leu Cys Met Val Gly Leu Phe Phe Gly Ser Ala				
	340		345	350
Ile Val Met Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln				
	355		360	365
Lys Val Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro				
	370		375	380
Leu Ile Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Lys Arg				
	385		390	395 400
Val Leu Trp Lys Gln Arg Ser Lys				
	405			

<210> 60
 <211> 1056
 <212> PRT
 <213> Homo sapiens

<400> 60
Met Pro Val Leu Leu Pro Val His Phe Ser Ala Lys Cys Pro Leu Leu
1 5 10 15
Leu Leu Cys Asp Pro Ala Asn Pro Pro Ser Glu Pro Leu Pro Ser Gln
20 25 30
Gly Cys Phe Ile Phe Ile His Arg Val Leu Leu Asp Leu Ser Thr Ala
35 40 45
Gly Glu Ser Gly Asn Thr Ala Gly Phe Ile Cys Asp Gln Ala Leu Leu
50 55 60
Thr Ser Pro Val Arg Glu Asp Gly Ala Glu Asn Gly Leu Gly Phe His
65 70 75 80
Gln Pro Val Glu Leu His Ile Cys Gly Asp Ala Val Gly Phe Val Gly
85 90 95
Met Gly Gln Arg Arg Lys Pro Met Ser Val Pro Trp Ser His Pro Lys
100 105 110
Ile Ser Glu Lys Cys Ala Ser Asp Thr Trp Cys Thr Asp Ala Thr Tyr
115 120 125
His Arg Glu His Ser Lys Pro Ser Gly Pro Trp Glu His Gly Pro Leu
130 135 140
Lys Pro Phe Glu Asp Trp Val Pro Ala Leu Pro Tyr Pro Leu Trp Pro
145 150 155 160
Gln Glu Leu Leu His Cys Gly Ser Gln Ser Gly Asp Cys Met Cys Leu
165 170 175
Leu Leu Leu Glu Ser Ser Arg Arg Ser Pro Pro Thr Leu Pro Ile Pro
180 185 190
Leu Thr Phe Pro Arg Leu Cys Gln Ser Phe Pro Leu Leu Thr Ala Ser
195 200 205
Gly Lys Glu Pro Ser Cys Gly Phe Thr Ser Ala Leu Arg Arg Leu Tyr
210 215 220
Gly Cys Gly Ala Ala Glu Arg Pro Gln Ser Pro Val Thr Pro Lys Thr
225 230 235 240
Glu Thr Ser Glu Gln Gly Pro Lys Asp Pro Pro Ile His Leu Ala His
245 250 255
Pro Ser Asp Arg Ala Leu Ser Pro Ser Cys Phe Leu Ser Leu Arg Ala
260 265 270
Val Ile Leu Thr Cys Lys Asn Arg Asp Ala Gln Val Glu Glu Gly His
275 280 285
Arg Arg Glu Pro Pro Val Leu Asp Cys Gly Tyr Gln Arg Ser Gly Thr

290	295	300
Arg Gly Asn His Thr 305	Arg Arg Ile Cys Ser 310	Thr Leu Arg Gly Ser Arg 315 320
Ile Glu Ala Trp Val 325	Ala Ala Ala Thr 330	Leu Gln Arg Gly Pro Tyr Phe 335
Arg Lys Gln Gln Pro 340	Leu Gly Lys Asp 345	Ser Trp Ser Val Ala Glu Asp 350
Trp Ile Glu Ala Phe Met 355	Leu Ala Phe Gly 360	Val Arg Val Leu Trp Asp 365
Ala Ser Met Ala Leu Glu 370	Ala Gln Arg Asp 375	Pro Ser Ser Asn Asp Thr 380
Lys Gly Lys Asp Gln 385	Leu Thr Lys Arg 390	Asp Gln Arg Asn Pro Gln Asn 395 400
Phe Ala Leu Leu Gln 405	Lys Ser Ala Ala 410	Ser Asp Trp Asn Ser Gln Pro 415
Val Cys Arg Arg Gly 420	Tyr Leu Thr Cys 425	Ala Ser Ala Ser Leu Gly Glu 430
Ile Ser Ser Pro His Phe 435	Pro Val His Leu 440	Asn Ala Pro Lys Cys His 445
Trp Gly Leu Ser Ser 450	Ser Pro Val Glu 455	Arg Trp Met Leu Arg Glu Arg 460
Lys Ala Val Thr Asp 465	Glu Ser Ser Ser 470	Ser Trp Met Val Ala Ile Arg 475 480
Ala Arg Glu Thr Pro 485	Gly Ile Leu Ala 490	Gln Arg Ile Cys Ser Ala Leu 495
Lys Gly Val Trp Cys 500	Gln Ala Ala Gln 505	Gly Ser Leu Pro Arg Leu Leu 510
Ser Ser Leu Ser Ile 515	Ser Thr Gly Cys 520	Asp Lys Thr Ala Val Leu Thr 525
Phe Asp Arg Ala Leu 530	Leu Thr Arg Glu 535	His Ser Lys Pro Asn Gly Pro 540
Trp Glu Arg Gly Pro 545	Leu Lys Pro Ser 550	Gly Asp Trp Asp Thr Cys Leu 555 560
His Tyr Leu Leu Trp 565	Pro Gln Glu Leu 570	Phe His Cys Arg Ser Gln Thr 575
Glu Asp Tyr Thr Val 580	Thr Trp Phe Asp 585	Val Val Asp Arg Gln Met Gln 590
Lys Tyr Ser Gln Ser 600	Pro Phe Leu Glu 605	Gln Arg Val Lys Lys Thr Met 610

595					600					605					
Ser	Pro	Asp	Gly	Asn	His	Ser	Ser	Asp	Pro	Thr	Glu	Phe	Val	Leu	Ala
610						615					620				
Gly	Leu	Pro	Asn	Leu	Asn	Ser	Ala	Arg	Val	Glu	Leu	Phe	Ser	Val	Phe
625					630					635					640
Leu	Leu	Val	Tyr	Leu	Leu	Asn	Leu	Thr	Gly	Asn	Val	Leu	Ile	Val	Gly
				645					650					655	
Val	Val	Arg	Ala	Asp	Thr	Arg	Leu	Gln	Thr	Pro	Met	Tyr	Phe	Phe	Leu
			660					665					670		
Gly	Asn	Leu	Ser	Cys	Leu	Glu	Ile	Leu	Leu	Thr	Ser	Val	Ile	Ile	Pro
		675					680					685			
Lys	Met	Leu	Ser	Asn	Phe	Leu	Ser	Arg	Gln	His	Thr	Ile	Ser	Phe	Ala
	690						695					700			
Ala	Cys	Ile	Thr	Gln	Phe	Tyr	Phe	Tyr	Phe	Phe	Leu	Gly	Ala	Ser	Glu
705					710					715					720
Phe	Leu	Leu	Leu	Ala	Val	Met	Ser	Ala	Asp	Arg	Tyr	Leu	Ala	Ile	Cys
				725					730					735	
His	Pro	Leu	Arg	Tyr	Pro	Leu	Leu	Met	Ser	Gly	Ala	Val	Cys	Phe	Arg
			740					745					750		
Val	Ala	Leu	Ala	Cys	Trp	Val	Gly	Gly	Leu	Val	Pro	Val	Leu	Gly	Pro
		755					760					765			
Thr	Val	Ala	Val	Ala	Leu	Leu	Pro	Phe	Cys	Lys	Gln	Gly	Ala	Val	Val
	770						775					780			
Gln	His	Phe	Phe	Cys	Asp	Ser	Gly	Pro	Leu	Leu	Arg	Leu	Ala	Cys	Thr
785					790					795					800
Asn	Thr	Lys	Lys	Leu	Glu	Glu	Thr	Asp	Phe	Val	Leu	Ala	Ser	Leu	Val
				805					810					815	
Ile	Val	Ser	Ser	Leu	Leu	Ile	Thr	Ala	Val	Ser	Tyr	Gly	Leu	Ile	Val
				820				825					830		
Leu	Ala	Val	Leu	Ser	Ile	Pro	Ser	Ala	Ser	Gly	Arg	Gln	Lys	Ala	Phe
		835					840					845			
Ser	Thr	Cys	Thr	Ser	His	Leu	Ile	Val	Val	Thr	Leu	Phe	Tyr	Gly	Ser
	850						855					860			
Ala	Ile	Phe	Leu	Tyr	Val	Arg	Pro	Ser	Gln	Ser	Gly	Ser	Val	Asp	Thr
865					870					875					880
Asn	Trp	Ala	Val	Thr	Val	Ile	Thr	Thr	Phe	Val	Thr	Pro	Leu	Leu	Asn
				885					890					895	
Pro	Phe	Ile	Tyr	Ala	Leu	Arg	Asn	Glu	Gln	Val	Lys	Glu	Ala	Leu	Lys

115	120	125
Pro Leu Arg Tyr Pro Phe Leu Met His Arg Gly Leu Cys Ala Arg Leu		
130	135	140
Val Val Val Ser Trp Cys Thr Gly Val Ser Thr Gly Phe Leu His Ser		
145	150	155 160
Met Met Ile Ser Arg Leu Asp Phe Cys Gly Arg Asn Gln Ile Asn His		
165	170	175
Phe Phe Cys Asp Leu Pro Pro Leu Met Gln Leu Ser Cys Ser Arg Val		
180	185	190
Tyr Ile Thr Glu Val Thr Ile Phe Ile Leu Ser Ile Ala Val Leu Cys		
195	200	205
Ile Cys Phe Phe Leu Thr Leu Gly Pro Tyr Val Phe Ile Val Ser Ser		
210	215	220
Ile Leu Arg Ile Pro Ser Thr Ser Gly Arg Arg Lys Thr Phe Ser Thr		
225	230	235 240
Cys Gly Ser His Leu Ala Val Val Thr Leu Tyr Tyr Gly Thr Met Ile		
245	250	255
Ser Met Tyr Val Cys Pro Ser Pro His Leu Leu Pro Glu Ile Asn Lys		
260	265	270
Ile Ile Ser Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Val		
275	280	285
Ile Tyr Ser Leu Arg Asn Lys Asp Phe Lys Glu Ala Val Arg Lys Val		
290	295	300
Met Arg Arg Lys Cys Gly Ile Leu Trp Ser Thr Ser Lys Arg Lys Phe		
305	310	315 320
Leu Tyr		

<210> 62
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 62
 Met Gly Glu Asn Gln Thr Met Val Thr Glu Phe Leu Leu Leu Gly Phe
 1 5 10 15
 Leu Leu Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
 20 25 30
 Phe Tyr Ile Phe Thr Leu Leu Gly Asn Gly Ala Ile Leu Gly Leu Ile
 35 40 45
 Ser Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His

50	55	60
Leu Ala Val Val Asp Ile Ala Tyr Thr Arg Asn Thr Val Pro Gln Met		
65	70	75 80
Leu Ala Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Cys		
	85	90 95
Met Thr Gln Thr Phe Leu Cys Leu Ser Phe Gly His Ser Glu Cys Leu		
	100	105 110
Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro		
	115	120 125
Leu Arg Tyr Ser Val Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala		
	130	135 140
Val Thr Ser Trp Thr Cys Gly Ser Leu Leu Ala Leu Ala His Val Val		
	145	150 155 160
Leu Ile Leu Arg Leu Pro Phe Ser Gly Pro His Glu Ile Asn His Phe		
	165	170 175
Phe Cys Glu Ile Leu Ser Val Leu Arg Leu Ala Cys Ala Asp Thr Trp		
	180	185 190
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Phe Leu Val Gly		
	195	200 205
Pro Pro Ser Leu Val Leu Val Ser Tyr Ser His Ile Leu Ala Ala Ile		
	210	215 220
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys		
	225	230 235 240
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Ile		
	245	250 255
Met Tyr Met Ala Pro Lys Ser Arg His Pro Glu Glu Gln Gln Lys Val		
	260	265 270
Phe Phe Leu Phe Tyr Ser Phe Phe Asn Pro Thr Leu Asn Pro Leu Ile		
	275	280 285
Tyr Ser Leu Arg Asn Gly Glu Val Lys Gly Ala Leu Arg Arg Ala Leu		
	290	295 300
Gly Lys Glu Ser His Ser		
305	310	
<210> 63		
<211> 217		
<212> PRT		
<213> Homo sapiens		
<400> 63		
Phe Leu Glu Ile Trp Tyr Val Ser Ser Thr Val Pro Lys Met Leu Val		

1	5	10	15
Asn Phe Leu Ser Glu Lys Lys Asn Ile Ser Phe Ala Gly Cys Phe Leu	20	25	30
Gln Phe Tyr Phe Phe Phe Ser Leu Gly Thr Ser Glu Cys Leu Leu Leu	35	40	45
Thr Val Met Ala Phe Asp Gln Tyr Leu Ala Ile Cys Arg Pro Leu Leu	50	55	60
Tyr Pro Asn Ile Met Thr Gly His Leu Tyr Ala Lys Leu Val Ile Leu	65	70	75
Cys Trp Val Cys Gly Phe Leu Trp Phe Leu Ile Pro Ile Val Leu Ile	85	90	95
Ser Gln Met Pro Phe Cys Gly Pro Asn Ile Ile Asp His Val Val Cys	100	105	110
Asp Pro Gly Pro Arg Phe Ala Leu Asp Cys Val Ser Ala Pro Arg Ile	115	120	125
Gln Leu Phe Cys Tyr Thr Leu Ser Ser Leu Val Ile Phe Gly Asn Phe	130	135	140
Leu Phe Ile Ile Gly Ser Tyr Thr Leu Val Leu Lys Ala Met Leu Gly	145	150	155
Met Pro Ser Ser Thr Gly Arg His Lys Ala Phe Ser Thr Cys Gly Ser	165	170	175
His Leu Ala Val Val Ser Leu Cys Tyr Ser Ser Leu Met Val Met Tyr	180	185	190
Val Ser Pro Gly Leu Gly His Ser Thr Gly Met Gln Lys Ile Glu Thr	195	200	205
Leu Phe Tyr Ala Met Val Thr Pro Leu	210	215	

<210> 64
 <211> 324
 <212> PRT
 <213> Mus musculus

<400> 64
 Met Ser Leu Phe Pro Gln Arg Asn Leu Asp Ala Met Asn Arg Ser Ala
 1 5 10 15
 Ala His Val Thr Glu Phe Val Leu Leu Gly Phe Pro Gly Ser Trp Lys
 20 25 30
 Ile Gln Ile Phe Leu Phe Val Leu Phe Leu Val Phe Tyr Val Leu Thr
 35 40 45
 Leu Leu Gly Asn Gly Ala Ile Ile Cys Ala Val Arg Cys Asp Ser Arg

50	55	60
Leu His Thr Pro Met Tyr Phe Leu Leu Gly Asn Phe Ser Phe Leu Glu		
65	70	75 80
Ile Trp Tyr Val Ser Ser Thr Ile Pro Asn Ile Leu Ala Asn Ile Leu		
	85	90 95
Ser Lys Thr Lys Ala Ile Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr		
	100	105 110
Phe Phe Phe Ser Leu Gly Thr Thr Glu Cys Leu Phe Leu Ala Val Met		
	115	120 125
Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu His Tyr Pro Thr		
	130	135 140
Ile Met Thr Arg Arg Leu Cys Cys Ile Leu Val Ser Ser Cys Trp Leu		
	145	150 155 160
Ile Gly Phe Leu Gly Tyr Pro Ile Pro Ile Phe Ser Ile Ser Gln Leu		
	165	170 175
Pro Phe Cys Gly Ser Asn Ile Ile Asp His Phe Leu Cys Asp Met Asp		
	180	185 190
Pro Leu Met Ala Leu Ser Cys Ala Pro Ala Pro Ile Thr Glu Phe Ile		
	195	200 205
Phe Tyr Ala Gln Ser Ser Phe Val Leu Phe Phe Thr Ile Ala Tyr Ile		
	210	215 220
Leu Arg Ser Tyr Ile Leu Leu Leu Arg Ala Val Phe Gln Val Pro Ser		
	225	230 235 240
Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val		
	245	250 255
Val Val Ser Leu Phe Tyr Gly Thr Val Met Val Met Tyr Val Ser Pro		
	260	265 270
Thr Tyr Gly Ile Pro Ile Leu Met Gln Lys Ile Leu Thr Leu Val Tyr		
	275	280 285
Ser Val Met Thr Pro Leu Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn		
	290	295 300
Lys Asp Met Lys Leu Ala Leu Arg Asn Val Leu Leu Gly Met Arg Ile		
	305	310 315 320
Val Lys Asn Met		

<210> 65
 <211> 506
 <212> PRT
 <213> Homo sapiens

<400> 65

Lys Pro Ser Gly Asp Trp Asp Thr Cys Leu His Tyr Leu Leu Trp Pro
1 5 10 15

Gln Glu Leu Phe His Cys Arg Ser Gln Thr Glu Asp Tyr Thr Val Thr
20 25 30

Trp Phe Asp Val Val Asp Arg Gln Met Gln Lys Tyr Ser Gln Ser Pro
35 40 45

Phe Leu Glu Gln Arg Val Lys Lys Thr Met Ser Pro Asp Gly Asn His
50 55 60

Ser Ser Asp Pro Thr Glu Phe Val Leu Ala Gly Leu Pro Asn Leu Asn
65 70 75 80

Ser Ala Arg Val Glu Leu Phe Ser Val Phe Leu Leu Val Tyr Leu Leu
85 90 95

Asn Leu Thr Gly Asn Val Leu Ile Val Gly Val Val Arg Ala Asp Thr
100 105 110

Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Cys Leu
115 120 125

Glu Ile Leu Leu Thr Ser Val Ile Ile Pro Lys Met Leu Ser Asn Phe
130 135 140

Leu Ser Arg Gln His Thr Ile Ser Phe Ala Ala Cys Ile Thr Gln Phe
145 150 155 160

Tyr Phe Tyr Phe Phe Leu Gly Ala Ser Glu Phe Leu Leu Leu Ala Val
165 170 175

Met Ser Ala Asp Arg Tyr Leu Ala Ile Cys His Pro Leu Arg Tyr Pro
180 185 190

Leu Leu Met Ser Gly Ala Val Cys Phe Arg Val Ala Leu Ala Cys Trp
195 200 205

Val Gly Gly Leu Val Pro Val Leu Gly Pro Thr Val Ala Val Ala Leu
210 215 220

Leu Pro Phe Cys Lys Gln Gly Ala Val Val Gln His Phe Phe Cys Asp
225 230 235 240

Ser Gly Pro Leu Leu Arg Leu Ala Cys Thr Asn Thr Lys Lys Leu Glu
245 250 255

Glu Thr Asp Phe Val Leu Ala Ser Leu Val Ile Val Ser Ser Leu Leu
260 265 270

Ile Thr Ala Val Ser Tyr Gly Leu Ile Val Leu Ala Val Leu Ser Ile
275 280 285

Pro Ser Ala Ser Gly Arg Gln Lys Ala Phe Ser Thr Cys Thr Ser His

290		295		300
Leu Ile Val Val Thr	Leu Phe Tyr Gly Ser	Ala Ile Phe Leu Tyr Val		
305	310	315	320	
Arg Pro Ser Gln Ser	Gly Ser Val Asp Thr	Asn Trp Ala Val Thr Val		
	325	330	335	
Ile Thr Thr Phe Val Thr	Pro Leu Leu Asn Pro Phe Ile Tyr Ala Leu			
	340	345	350	
Arg Asn Glu Gln Val Lys	Glu Ala Leu Lys Asp Met Phe Arg Lys Gly			
	355	360	365	
Cys Asp Phe Ala Phe Glu	Arg Cys Asn Ser Ala Cys Asn Cys Arg Lys			
	370	375	380	
Gly Ser Leu Thr Thr Thr	Thr Lys Ser Ala Thr Leu Arg Cys Gly Ala			
	385	390	395	400
Gly Ala Lys Ala Arg Ala	Gly Ala Arg Leu His Pro Ala Ala Gly Ser			
	405	410	415	
Pro Arg Asp Ser Arg Lys	Val Asn Val Arg Val Gln Lys Asp Pro Arg			
	420	425	430	
Arg Ser Val Pro Lys Val	Glu Thr Phe Ile Ser Gly Ser Gly Pro Ser			
	435	440	445	
Cys Val Gly Gln Cys Thr	Gly Arg Val Cys Ile Leu Lys Gly Thr Arg			
	450	455	460	
Thr Ile Ser Gly Gly Leu	Trp Leu Glu Asp Pro Arg Lys Thr Arg Thr			
	465	470	475	480
Thr Asp Phe Thr His Arg	Lys Ile Lys Val Thr Ala Gly Leu Ala Gly			
	485	490	495	
Glu Lys Val Glu Pro Thr	Leu Pro Arg Cys			
	500	505		

<210> 66
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 66
 Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Gln Met Val Val
 1 5 10 15
 Asn Ile Leu Thr Gly Thr Lys Thr Ile Ser Phe Ala Gly Cys Leu Thr
 20 25 30
 Gln Leu Phe Phe Phe Val Ser Phe Val Asn Met Asp Ser Leu Leu Leu
 35 40 45
 Cys Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His

50 55 60
 Tyr Thr Ala Arg Met Asn Leu Cys Leu Cys Val Gln Leu Val Ala Gly
 65 70 75 80
 Leu Trp Leu Val Thr Tyr Leu His Ala Leu Leu His Thr Val Leu Ile
 85 90 95
 Ala Gln Leu Ser Phe Cys Ala Ser Asn Ile Ile His His Phe Leu Cys
 100 105 110
 Asp Leu Asn Pro Leu Leu Gln Leu Ser Cys Ser Asp Val Ser Phe Asn
 115 120 125
 Val Met Ile Ile Phe Ala Val Gly Asp Leu Leu Ala Leu Thr Pro Leu
 130 135 140
 Val Cys Ile Leu Val Ser Tyr Gly Leu Ile Phe Ser Thr Val Leu Lys
 145 150 155 160
 Ile Thr Ser Thr Gln Gly Lys Gln Arg Ala Val Ser Thr Cys Ser Cys
 165 170 175
 His Leu Ser Val Val Val Leu Phe Tyr Gly Thr Ala Ile Ala Val Tyr
 180 185 190
 Phe Ser Pro Ser Ser Pro His Met Pro Glu Ser Asp Thr Leu Ser Thr
 195 200 205
 Ile Met Tyr Ser Met Val Ala Pro
 210 215
 <210> 67
 <211> 248
 <212> PRT
 <213> Homo sapiens
 <400> 67
 Met Pro Phe Phe Pro Lys Leu Pro Val Ala Asp Gln Val Thr Gly Pro
 1 5 10 15
 Met Asn Val Ser Glu Pro Asn Ser Ser Phe Ala Leu Val Asn Glu Phe
 20 25 30
 Ile Leu Gln Asp Leu Ser Phe Glu Trp Thr Ile Gln Ile Phe Leu Phe
 35 40 45
 Ser Leu Phe Thr Thr Thr Tyr Ala Leu Thr Ile Thr Gly Asn Gly Ala
 50 55 60
 Ile Ala Cys Ala Leu Trp Cys Asp Arg Arg Arg His Thr Pro Met Tyr
 65 70 75 80
 Met Phe Leu Gly Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Ser Ser
 85 90 95
 Thr Val Pro Lys Met Leu Met Pro Phe Cys Gly Pro Asn Ile Asn Asp

100 105 110
 His Val Val Cys Asp Pro Gly Pro Leu Phe Ala Leu Ala Cys Val Ser
 115 120 125
 Ala Pro Arg Ile Gln Leu Phe Cys Tyr Thr Leu Ser Ser Leu Val Ile
 130 135 140
 Phe Gly Asn Phe Leu Phe Ile Ile Gly Ser Tyr Thr Leu Val Leu Lys
 145 150 155 160
 Ala Val Leu Gly Met Pro Ser Ser Thr Gly Lys His Lys Ala Phe Ser
 165 170 175
 Thr Cys Gly Ser His Leu Ala Val Val Ser Leu Phe Tyr Gly Ser Leu
 180 185 190
 Met Val Met Cys Val Ser Pro Gly Leu Gly His Ser Met Gly Met Gln
 195 200 205
 Lys Ile Lys Thr Leu Phe Tyr Ala Met Val Thr Pro Leu Phe Asn Pro
 210 215 220
 Leu Ile Tyr Ser Leu Gln Asn Lys Glu Ile Lys Ala Ala Leu Arg Lys
 225 230 235 240
 Val Leu Gly Ser Ser Asn Ile Ile
 245

<210> 68
 <211> 316
 <212> PRT
 <213> Homo sapiens

<400> 68
 Met Ile Cys Glu Asn His Thr Arg Val Thr Glu Phe Ile Leu Leu Gly
 1 5 10 15
 Phe Thr Asn Asn Pro Glu Met Gln Val Ser Leu Phe Ile Phe Phe Leu
 20 25 30
 Ala Ile Tyr Thr Val Thr Leu Leu Gly Asn Phe Leu Ile Val Thr Val
 35 40 45
 Thr Ser Val Asp Leu Ala Leu Gln Thr Pro Met Tyr Phe Phe Leu Gln
 50 55 60
 Asn Leu Ser Leu Leu Glu Val Cys Phe Thr Leu Val Met Val Pro Lys
 65 70 75 80
 Met Leu Val Asp Leu Val Ser Pro Arg Lys Ile Ile Ser Phe Val Gly
 85 90 95
 Cys Gly Thr Gln Met Tyr Phe Phe Phe Phe Gly Ser Ser Glu Cys
 100 105 110
 Phe Leu Leu Ser Met Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Asn

115	120	125
Pro Leu His Tyr Ser Val Ile Met Asn Arg Ser Leu Cys Leu Trp Met		
130	135	140
Ala Ile Gly Ser Trp Met Ser Gly Val Pro Val Ser Met Leu Gln Thr		
145	150	155
Ala Trp Met Met Ala Leu Pro Phe Cys Gly Pro Asn Ala Val Asp His		
	165	170
		175
Phe Phe Cys Asp Gly Pro Pro Val Leu Lys Leu Val Thr Val Asp Thr		
	180	185
		190
Thr Met Tyr Glu Met Gln Ala Leu Ala Ser Thr Leu Leu Phe Ile Met		
	195	200
		205
Phe Pro Phe Cys Leu Ile Leu Val Ser Tyr Thr Arg Ile Ile Ile Thr		
	210	215
		220
Ile Leu Arg Met Ser Ser Ala Thr Gly Arg Gln Lys Ala Phe Ser Thr		
225	230	235
		240
Cys Ser Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Thr Ala Ser		
	245	250
		255
Leu Thr Tyr Leu Arg Pro Lys Ser Asn Gln Ser Pro Glu Ser Lys Lys		
	260	265
		270
Leu Val Ser Leu Ser Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile		
	275	280
		285
Ile Tyr Gly Leu Arg Asn Asn Glu Val Lys Gly Ala Val Lys Arg Thr		
	290	295
		300
Ile Thr Gln Lys Val Leu Gln Lys Leu Asp Val Phe		
305	310	315
<210> 69		
<211> 316		
<212> PRT		
<213> Homo sapiens		
<400> 69		
Met Asp Asn Gln Ser Ser Thr Pro Gly Phe Leu Leu Leu Gly Phe Ser		
1	5	10
		15
Glu His Pro Gly Leu Glu Arg Thr Leu Phe Val Val Val Phe Thr Ser		
	20	25
		30
Tyr Leu Leu Thr Leu Val Gly Asn Thr Leu Ile Ile Leu Leu Ser Ala		
	35	40
		45
Leu Asp Pro Lys Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu		
	50	55
		60
Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Cys Val Pro Gln Met Leu		

65		70		75		80
Val Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Phe Leu Asp Cys Ser	85		90		95	
Val Gln Ile Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu	100		105		110	
Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu	115		120		125	
His Tyr Ala Thr Ile Ile His Pro Arg Leu Cys Trp Gln Leu Ala Ser	130		135		140	
Val Ala Trp Val Ile Gly Leu Val Glu Ser Val Val Gln Thr Pro Ser	145		150		155	160
Thr Leu His Leu Pro Phe Cys Pro Asp Arg Gln Val Asp Asp Phe Val	165		170		175	
Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Glu Asp Thr Ser Tyr	180		185		190	
Asn Glu Ile Gln Val Ala Val Ala Ser Val Phe Ile Leu Val Val Pro	195		200		205	
Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Thr Trp Ala Val Leu	210		215		220	
Arg Ile Asn Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser	225		230		235	240
Ser His Leu Thr Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val	245		250		255	
Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Glu Arg Gly Lys Phe Phe	260		265		270	
Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro Leu Ile Tyr	275		280		285	
Thr Leu Arg Asn Lys Glu Val Thr Arg Ala Phe Arg Arg Leu Leu Gly	290		295		300	
Lys Glu Arg Asp Ser Arg Glu Ser Trp Arg Ala Ala	305		310		315	
<210> 70						
<211> 321						
<212> PRT						
<213> Mus musculus						
<400> 70						
Met Ser Val Asn Cys Ser Leu Trp Gln Glu Asn Lys Leu Ser Val Lys	1		5		10	15
His Phe Ala Phe Ala Lys Phe Ser Glu Val Pro Glu Glu Cys Phe Leu						

20					25					30					
Leu	Phe	Thr	Leu	Ile	Leu	Leu	Met	Phe	Leu	Val	Ser	Leu	Thr	Gly	Asn
		35					40					45			
Ala	Leu	Ile	Thr	Leu	Ala	Ile	Cys	Thr	Ser	Pro	Ala	Leu	His	Thr	Pro
	50					55					60				
Met	Tyr	Phe	Phe	Leu	Ala	Asn	Leu	Ser	Leu	Leu	Glu	Ile	Gly	Tyr	Thr
65						70					75				80
Cys	Ser	Val	Ile	Pro	Lys	Met	Leu	Gln	Asn	Leu	Val	Ser	Glu	Ile	Arg
				85					90						95
Gly	Ile	Ser	Arg	Glu	Gly	Cys	Val	Thr	Gln	Met	Phe	Phe	Phe	Ile	Phe
			100					105						110	
Phe	Gly	Ile	Thr	Glu	Cys	Cys	Leu	Leu	Ala	Ala	Met	Ala	Phe	Asp	Cys
		115					120					125			
Tyr	Met	Ala	Ile	Cys	Ser	Pro	Leu	His	Tyr	Ser	Thr	Arg	Met	Ser	Arg
	130					135					140				
Glu	Val	Cys	Ala	His	Leu	Ala	Leu	Val	Ser	Trp	Gly	Met	Gly	Cys	Ile
145						150					155				160
Val	Gly	Leu	Gly	Gln	Thr	Asn	Phe	Ile	Phe	Ser	Leu	Asn	Phe	Cys	Gly
				165					170					175	
Pro	Cys	Glu	Ile	Asp	His	Phe	Phe	Cys	Asp	Leu	Pro	Pro	Val	Leu	Ala
			180					185					190		
Leu	Ala	Cys	Gly	Asp	Thr	Ser	Gln	Asn	Glu	Ala	Ala	Ile	Phe	Val	Ala
		195					200					205			
Val	Val	Leu	Cys	Ile	Ser	Ser	Pro	Phe	Leu	Leu	Ile	Ile	Tyr	Ser	Tyr
	210					215					220				
Val	Arg	Ile	Leu	Val	Ala	Val	Leu	Val	Met	Pro	Ser	Pro	Glu	Gly	Arg
225						230					235				240
His	Lys	Ala	Leu	Ser	Thr	Cys	Ser	Ser	His	Leu	Leu	Val	Val	Thr	Leu
				245					250					255	
Phe	Phe	Gly	Ser	Gly	Ser	Ile	Thr	Tyr	Leu	Arg	Pro	Lys	Ser	Ser	His
			260					265					270		
Leu	Pro	Gly	Met	Asp	Lys	Leu	Leu	Ala	Leu	Phe	Tyr	Thr	Ala	Val	Thr
		275					280					285			
Ser	Met	Leu	Asn	Pro	Ile	Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Glu	Val	Lys
	290					295					300				
Ala	Ala	Leu	Arg	Lys	Thr	Leu	Ser	Leu	Lys	Thr	Ser	Arg	Ala	Ile	Asn
305				310					315						320
Arg															

<210> 71
 <211> 321
 <212> PRT
 <213> Rattus norvegicus

<400> 71
 Met Thr Val Asn Cys Ser Leu Trp Gln Glu Asn Ser Leu Thr Val Lys
 1 5 10 15
 His Phe Ala Phe Ala Lys Phe Ser Glu Val Pro Gly Glu Cys Phe Leu
 20 25 30
 Leu Phe Asn Leu Ile Leu Leu Met Phe Leu Val Ser Leu Thr Gly Asn
 35 40 45
 Thr Leu Ile Val Leu Ala Ile Cys Thr Ser Pro Ser Leu His Thr Pro
 50 55 60
 Met Tyr Phe Phe Leu Ala Asn Leu Ser Leu Leu Glu Ile Gly Tyr Thr
 65 70 75 80
 Cys Ser Val Ile Pro Lys Met Leu Gln Ser Leu Val Ser Glu Ala Arg
 85 90 95
 Glu Ile Ser Arg Glu Gly Cys Ala Thr Gln Met Phe Phe Phe Ala Phe
 100 105 110
 Phe Gly Ile Thr Glu Cys Cys Leu Leu Ala Ala Met Ala Phe Asp Arg
 115 120 125
 Cys Met Ala Ile Cys Ser Pro Leu His Tyr Ala Thr Arg Met Ser Arg
 130 135 140
 Glu Val Cys Ala His Leu Ala Ile Val Ser Trp Gly Met Gly Cys Ile
 145 150 155 160
 Val Ser Leu Gly Gln Thr Asn Phe Ile Phe Ser Leu Asn Phe Cys Gly
 165 170 175
 Pro Cys Glu Ile Asp His Phe Phe Cys Asp Leu Pro Pro Leu Leu Ala
 180 185 190
 Leu Ala Cys Gly Asp Thr Ser Gln Asn Glu Ala Ala Ile Phe Val Val
 195 200 205
 Ala Val Leu Cys Ile Ser Ser Pro Phe Leu Leu Ile Ile Tyr Ser Tyr
 210 215 220
 Val Lys Ile Leu Ile Ala Val Leu Leu Met Pro Ser Pro Glu Gly Arg
 225 230 235 240
 His Lys Ala Leu Ser Thr Cys Ser Ser His Leu Leu Val Val Thr Leu
 245 250 255
 Phe Tyr Gly Ser Ala Cys Ile Thr Tyr Leu Arg Pro Lys Ser Ser His

195	200	205
Gly Ser Tyr Gly Arg Ile Leu Val Thr Ile Phe Arg Ile Pro Ser Val		
210	215	220
Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val		
225	230	235 240
Val Ser Leu Phe Tyr Gly Thr Ala Leu Phe Ile Tyr Ile Arg Pro Lys		
	245	250 255
Ala Ser Tyr Asp Pro Ala Thr Asp Pro Leu Val Ser Leu Phe Tyr Ala		
	260	265 270
Val Val Thr Pro Ile Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Thr		
	275	280 285
Glu Val Lys Ala Ala Leu Lys Arg Thr Ile Gln Lys Thr Val Pro Met		
290	295	300

Glu Ile
305

<210> 73
<211> 312
<212> PRT
<213> Gallus gallus

<400> 73
Met Ala Glu Gly Asn His Thr Leu Ala Ser Glu Phe Ile Leu Val Gly
1 5 10 15
Leu Ser Asp His Pro Lys Met Lys Ala Ala Leu Phe Val Val Phe Leu
20 25 30
Leu Ile Tyr Val Ile Thr Phe Gln Gly Asn Leu Gly Ile Ile Ile Leu
35 40 45
Ile Gln Gly Asp Pro Arg Leu His Thr Ser Met Tyr Phe Phe Leu Ser
50 55 60
Ser Leu Ser Val Val Asp Ile Cys Phe Ser Ser Val Ile Ala Pro Arg
65 70 75 80
Thr Leu Val Asn Phe Leu Ser Glu Arg Arg Thr Ile Ser Phe Thr Gly
85 90 95
Cys Thr Gly Gln Thr Phe Phe Tyr Ile Val Phe Val Thr Thr Glu Cys
100 105 110
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
115 120 125
Pro Leu Leu Tyr Ser Thr Ile Met Thr Arg Arg Gln Cys Met Gln Leu
130 135 140
Val Val Gly Ser Tyr Ile Gly Gly Ile Leu Asn Ala Ile Ile Gln Thr

145		150		155		160
Thr Phe Ile Ile Arg Leu Pro Phe Cys Gly Ser Asn Ile Ile Asn His						
	165			170		175
Phe Phe Cys Asp Val Pro Pro Leu Leu Ala Leu Ser Leu Ala Ser Thr						
	180			185		190
Tyr Ile Ser Glu Met Ile Leu Phe Ser Leu Ala Gly Ile Ile Glu Leu						
	195			200		205
Ser Thr Val Thr Ser Ile Leu Val Ser Tyr Ile Phe Ile Ser Cys Ala						
	210			215		220
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Leu Ser Thr						
	225			230		235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Leu Tyr Gly Thr Thr Ile						
	245			250		255
Phe Thr Tyr Leu Arg Pro Ser Ser Ser Tyr Ser Leu Asn Thr Asp Lys						
	260			265		270
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu						
	275			280		285
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Gly Ala Leu Ser Arg Val						
	290			295		300
Val Glu Arg Ile Thr Val Arg Val						
	305			310		
<210> 74						
<211> 313						
<212> PRT						
<213> Homo sapiens						
<400> 74						
Met Lys Glu Val Arg Gly Arg Asn Gln Thr Glu Val Thr Glu Phe Leu						
1		5		10		15
Leu Leu Gly Leu Ser Asp Asn Pro Asp Leu Gln Gly Val Leu Phe Ala						
	20			25		30
Leu Phe Leu Leu Ile Tyr Met Ala Asn Met Val Gly Asn Leu Gly Met						
	35			40		45
Ile Val Leu Ile Lys Ile Asp Leu Cys Leu His Thr Pro Met Tyr Phe						
	50			55		60
Phe Leu Ser Ser Leu Ser Phe Val Asp Ala Ser Tyr Ser Ser Ser Val						
	65			70		75
Thr Pro Lys Met Leu Val Asn Leu Met Ala Glu Asn Lys Ala Ile Ser						
	85			90		95
Phe His Gly Cys Ala Ala Gln Phe Tyr Phe Phe Gly Ser Phe Leu Gly						

100					105					110					
Thr	Glu	Cys	Phe	Leu	Leu	Ala	Met	Met	Ala	Tyr	Asp	Arg	Tyr	Ala	Ala
		115					120					125			
Ile	Trp	Asn	Pro	Leu	Leu	Tyr	Pro	Val	Leu	Val	Ser	Gly	Arg	Ile	Cys
		130				135					140				
Phe	Leu	Leu	Ile	Ala	Thr	Ser	Phe	Leu	Ala	Gly	Cys	Gly	Asn	Ala	Ala
145					150					155					160
Ile	His	Thr	Gly	Met	Thr	Phe	Arg	Leu	Ser	Phe	Cys	Gly	Ser	Asn	Arg
				165					170					175	
Ile	Asn	His	Phe	Tyr	Cys	Asp	Thr	Pro	Pro	Leu	Leu	Lys	Leu	Ser	Cys
			180					185					190		
Ser	Asp	Thr	His	Phe	Asn	Gly	Ile	Val	Ile	Met	Ala	Phe	Ser	Ser	Phe
		195					200					205			
Ile	Val	Ile	Ser	Cys	Val	Met	Ile	Val	Leu	Ile	Ser	Tyr	Leu	Cys	Ile
	210					215					220				
Phe	Ile	Ala	Val	Leu	Lys	Met	Pro	Ser	Leu	Glu	Gly	Arg	His	Lys	Ala
225					230					235					240
Phe	Ser	Thr	Cys	Ala	Ser	Tyr	Leu	Met	Ala	Val	Thr	Ile	Phe	Phe	Gly
			245					250						255	
Thr	Ile	Leu	Phe	Met	Tyr	Leu	Arg	Pro	Thr	Ser	Ser	Tyr	Ser	Met	Glu
		260						265					270		
Gln	Asp	Lys	Val	Val	Ser	Val	Phe	Tyr	Thr	Val	Ile	Ile	Pro	Val	Leu
	275						280					285			
Asn	Pro	Leu	Ile	Tyr	Ser	Leu	Lys	Asn	Lys	Asp	Val	Lys	Lys	Ala	Leu
	290					295					300				
Lys	Lys	Ile	Leu	Trp	Lys	His	Ile	Leu							
305					310										
<210> 75															
<211> 452															
<212> PRT															
<213> Homo sapiens															
<400> 75															
Met	Ser	Lys	Ser	Val	Cys	Ser	Phe	Leu	Ile	Thr	Val	Pro	Tyr	Val	Tyr
1				5					10					15	
Gly	Ala	Leu	Thr	Gly	Leu	Met	Glu	Thr	Met	Trp	Thr	Tyr	Asn	Leu	Ala
			20					25					30		
Phe	Cys	Gly	Pro	Asn	Glu	Ile	Asn	His	Phe	Tyr	Cys	Ala	Asp	Pro	Pro
	35						40					45			
Leu	Ile	Lys	Leu	Ala	Cys	Ser	Asp	Thr	Tyr	Asn	Lys	Glu	Leu	Ser	Met

50	55	60
Phe Val Val Ala Gly Trp Asn Leu Ser Phe Ser Leu Phe Ile Ile Phe 65 70 75 80		
Ile Ser Tyr Phe Tyr Ile Phe Pro Ala Ile Leu Arg Ile Arg Ser Thr 85 90 95		
Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Ala 100 105 110		
Val Thr Ile Phe Tyr Ala Thr Leu Phe Phe Met Cys Leu Arg Pro Pro 115 120 125		
Ser Glu Glu Ser Met Glu Gln Gly Gln Met Met Ala Arg Lys Asp Met 130 135 140		
Ala His Ile Asn Cys Thr Gln Ala Thr Glu Phe Ile Leu Val Gly Leu 145 150 155 160		
Thr Asp His Gln Glu Leu Lys Met Pro Leu Phe Val Leu Phe Leu Ser 165 170 175		
Ile Tyr Leu Phe Thr Val Val Gly Asn Leu Gly Leu Ile Leu Leu Ile 180 185 190		
Arg Ala Asp Thr Ser Leu Asn Thr Pro Met Tyr Phe Phe Leu Ser Asn 195 200 205		
Leu Ala Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys Met 210 215 220		
Leu Gly Asn Phe Leu Tyr Lys Gln Asn Val Ile Ser Phe Asp Ala Cys 225 230 235 240		
Ala Thr Gln Leu Gly Cys Phe Leu Thr Phe Met Ile Ser Glu Ser Leu 245 250 255		
Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro 260 265 270		
Leu Leu Tyr Met Val Val Met Thr Pro Gly Ile Cys Ile Gln Leu Val 275 280 285		
Ala Val Pro Tyr Ser Tyr Ser Phe Leu Met Ala Leu Phe His Thr Ile 290 295 300		
Leu Thr Phe Arg Leu Ser Tyr Cys His Ser Asn Ile Val Asn His Phe 305 310 315 320		
Tyr Cys Asp Asp Met Pro Leu Leu Arg Leu Thr Cys Ser Asp Thr Arg 325 330 335		
Phe Lys Gln Leu Trp Ile Phe Ala Cys Ala Gly Ile Met Phe Ile Ser 340 345 350		
Ser Leu Leu Ile Val Phe Val Ser Tyr Met Phe Ile Ile Ser Ala Ile		

355 360 365
 Leu Arg Met His Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys
 370 375 380
 Gly Ser His Met Leu Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile Phe
 385 390 395 400
 Met Tyr Leu Gln Pro Ser Ser Ser His Ala Leu Asp Thr Asp Lys Met
 405 410 415
 Ala Ser Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu Ile
 420 425 430
 Tyr Ser Leu Gln Asn Lys Glu Val Lys Glu Ala Leu Lys Lys Ile Ile
 435 440 445
 Ile Asn Lys Asn
 450
 <210> 76
 <211> 313
 <212> PRT
 <213> Hylobates lar
 <400> 76
 Met Ala Asn Glu Asn Tyr Thr Lys Val Thr Glu Phe Ile Phe Thr Gly
 1 5 10 15
 Leu Asn Tyr Asn Pro Gln Leu Gln Val Phe Leu Phe Leu Leu Phe Leu
 20 25 30
 Thr Phe Tyr Val Ile Ser Val Thr Gly Asn Phe Gly Met Ile Val Leu
 35 40 45
 Ile Arg Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 His Leu Ser Phe Val Asp Ile Cys Phe Ser Ser Val Val Ser Pro Lys
 65 70 75 80
 Met Leu Thr Asp Phe Phe Val Lys Arg Lys Ala Ile Ser Phe Leu Gly
 85 90 95
 Cys Ala Leu Gln Gln Trp Phe Phe Gly Phe Phe Val Ala Ala Glu Cys
 100 105 110
 Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
 115 120 125
 Pro Leu Leu Tyr Ser Val Phe Met Ser Gln Arg Leu Cys Ile Gln Leu
 130 135 140
 Val Val Gly Pro Tyr Val Ile Gly Leu Met Asn Thr Met Thr His Thr
 145 150 155 160
 Thr Asn Ala Phe Arg Leu Pro Phe Cys Gly Leu Asn Val Ile Asn His

	165		170		175
Phe Phe Cys Asp Met Ser Pro Leu Leu Ser Leu Val Cys Ala Asp Thr	180		185		190
Arg Leu Asn Lys Leu Ala Val Phe Ile Met Ala Gly Ala Val Gly Val	195		200		205
Phe Ser Gly Leu Thr Ile Leu Ile Ser Tyr Ile Tyr Ile Leu Met Ala	210		215		220
Ile Leu Arg Ile Arg Ser Ala Asp Gly Arg Cys Lys Thr Phe Ser Thr	225		230		235
Cys Ser Ser His Leu Thr Ala Val Phe Ile Leu Tyr Gly Thr Leu Phe	245		250		255
Phe Ile Tyr Val Arg Pro Ser Ala Ser Phe Pro Leu Asp Leu Asn Lys	260		265		270
Val Val Ser Val Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Leu	275		280		285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ile His Arg Thr	290		295		300
Val Thr Gln Arg Lys Phe Cys Lys Ala	305		310		

<210> 77
 <211> 313
 <212> PRT
 <213> Pongo pygmaeus

<400> 77

Met Ala Asn Glu Asn Tyr Thr Lys Val Thr Glu Phe Ile Phe Thr Gly	1	5	10	15
Leu Asn Tyr Asn Pro Gln Leu Gln Val Phe Leu Phe Leu Leu Phe Leu	20	25	30	
Thr Phe Tyr Val Ile Ser Val Thr Gly Asn Leu Gly Met Ile Val Leu	35	40	45	
Ile Gln Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser	50	55	60	
His Leu Ser Phe Val Asp Ile Cys Phe Ser Ser Val Val Ser Pro Lys	65	70	75	80
Met Leu Thr Asp Phe Phe Val Lys Arg Lys Ala Ile Ser Phe Leu Gly	85	90	95	
Cys Ala Leu Gln Gln Arg Ser Phe Gly Phe Phe Val Ala Ala Glu Cys	100	105	110	
Phe Leu Leu Ala Ser Met Ala Tyr Asp His Tyr Val Ala Ile Cys Asn				

115	120	125
Pro Leu Leu Tyr Ser Val	Ala Met Ser Gln Arg Leu Cys Ile Gln Leu	
130	135	140
Val Val Gly Pro Tyr Val	Ile Gly Leu Met Asn Thr Met Thr His Thr	
145	150	155 160
Thr Asn Ala Phe His Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His		
	165 170	175
Phe Phe Cys Asp Met Ser Pro Leu Leu Ser Leu Val Cys Ala Asp Thr		
	180 185	190
Arg Leu Asn Lys Leu Ala Val Leu Ile Met Ala Gly Ala Val Gly Val		
	195 200	205
Phe Ser Gly Leu Thr Ile Leu Ile Ser Tyr Ile Tyr Ile Leu Met Ala		
	210 215	220
Ile Leu Arg Ile Arg Ser Ala Asp Gly Arg Tyr Lys Thr Phe Ser Thr		
	225 230	235 240
Cys Ser Ser His Leu Thr Ala Val Phe Ile Leu Tyr Gly Thr Leu Phe		
	245 250	255
Phe Ile Tyr Val Cys Pro Ser Ala Ser Phe Cys Leu Asp Leu Asn Lys		
	260 265	270
Val Val Ser Val Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Leu		
	275 280	285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ile His Arg Thr		
	290 295	300
Phe Thr Gln Arg Lys Phe Cys Lys Ala		
305	310	

<210> 78
 <211> 322
 <212> PRT
 <213> Homo sapiens

<400> 78
 Met Asp Lys Leu Ser Ser Gly Leu Asp Ile Tyr Arg Asn Pro Leu Lys
 1 5 10 15
 Asn Lys Thr Glu Val Thr Met Phe Ile Leu Thr Gly Phe Thr Asp Asp
 20 25 30
 Phe Glu Leu Gln Val Phe Leu Phe Leu Leu Phe Phe Ala Ile Tyr Leu
 35 40 45
 Phe Thr Leu Ile Gly Asn Leu Gly Leu Val Val Leu Val Ile Glu Asp
 50 55 60
 Ser Trp Leu His Asn Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Phe

65		70		75		80
Leu Asp Ala Cys Tyr Ser Thr Val Val Thr Pro Lys Met Leu Val Asn						
	85			90		95
Phe Leu Ala Lys Asn Lys Ser Ile Ser Phe Ile Gly Cys Ala Thr Gln						
	100		105		110	
Met Leu Leu Phe Val Thr Phe Gly Thr Thr Glu Cys Phe Leu Leu Ala						
	115		120		125	
Ala Met Ala Tyr Asp His Tyr Val Ala Ile Tyr Asn Pro Leu Leu Tyr						
	130		135		140	
Ser Val Ser Met Ser Pro Arg Val Tyr Val Pro Leu Ile Thr Ala Ser						
	145		150		155	160
Tyr Val Ala Gly Ile Leu His Ala Thr Ile His Ile Val Ala Thr Phe						
	165		170		175	
Ser Leu Ser Phe Cys Gly Ser Asn Glu Ile Arg His Val Phe Cys Asp						
	180		185		190	
Met Pro Pro Leu Leu Ala Ile Ser Cys Ser Asp Thr His Thr Asn Gln						
	195		200		205	
Leu Leu Leu Phe Tyr Phe Val Gly Ser Ile Glu Ile Val Thr Ile Leu						
	210		215		220	
Ile Val Leu Ile Ser Cys Asp Phe Ile Leu Leu Ser Ile Leu Lys Met						
	225		230		235	240
His Ser Ala Lys Gly Arg Gln Lys Ala Phe Ser Thr Cys Gly Ser His						
	245		250		255	
Leu Thr Gly Val Thr Ile Tyr His Gly Thr Ile Leu Val Ser Tyr Met						
	260		265		270	
Arg Pro Ser Ser Ser Tyr Ala Ser Asp His Asp Ile Ile Val Ser Ile						
	275		280		285	
Phe Tyr Thr Ile Val Ile Pro Lys Leu Asn Pro Ile Ile Tyr Ser Leu						
	290		295		300	
Arg Asn Lys Glu Val Lys Lys Ala Val Lys Lys Met Leu Lys Leu Val						
	305		310		315	320

Tyr Lys

<210> 79
 <211> 318
 <212> PRT
 <213> Homo sapiens

<400> 79
 Met Lys Asn Val Thr Glu Val Thr Leu Phe Val Leu Lys Gly Phe Thr

1	5	10	15
Asp Asn Leu Glu Leu Gln Thr Ile Phe Phe Phe Leu Phe Leu Ala Ile	20	25	30
Tyr Leu Phe Thr Leu Met Gly Asn Leu Gly Leu Ile Leu Val Val Ile	35	40	45
Arg Asp Ser Gln Leu His Lys Pro Met Tyr Tyr Phe Leu Ser Met Leu	50	55	60
Ser Ser Val Asp Ala Cys Tyr Ser Ser Val Ile Thr Pro Asn Met Leu	65	70	75
Val Asp Phe Thr Thr Lys Asn Lys Val Ile Ser Phe Leu Gly Cys Val	85	90	95
Ala Gln Val Phe Leu Ala Cys Ser Phe Gly Thr Thr Glu Cys Phe Leu	100	105	110
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Tyr Asn Pro Leu	115	120	125
Leu Tyr Ser Val Ser Met Ser Pro Arg Val Tyr Met Pro Leu Ile Asn	130	135	140
Ala Ser Tyr Val Ala Gly Ile Leu His Ala Thr Ile His Thr Val Ala	145	150	155
Thr Phe Ser Leu Ser Phe Cys Gly Ala Asn Glu Ile Arg Arg Val Phe	165	170	175
Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser Tyr Ser Asp Thr His Thr	180	185	190
Asn Gln Leu Leu Leu Phe Tyr Phe Val Gly Ser Ile Glu Leu Val Thr	195	200	205
Ile Leu Ile Val Leu Ile Ser Tyr Gly Leu Ile Leu Leu Ala Ile Leu	210	215	220
Lys Met Tyr Ser Ala Glu Gly Arg Arg Lys Val Phe Ser Thr Cys Gly	225	230	235
Ala His Leu Thr Gly Val Ser Ile Tyr Tyr Gly Thr Ile Leu Phe Met	245	250	255
Tyr Val Arg Pro Ser Ser Ser Tyr Ala Ser Asp His Asp Met Ile Val	260	265	270
Ser Ile Phe Tyr Thr Ile Val Ile Pro Leu Leu Asn Pro Val Ile Tyr	275	280	285
Ser Leu Arg Asn Lys Asp Val Lys Asp Ser Met Lys Lys Met Phe Gly	290	295	300
Lys Asn Gln Val Ile Asn Lys Val Tyr Phe His Thr Lys Lys			

20					25					30						
Leu	Phe	Leu	Leu	Ile	Tyr	Met	Ala	Asn	Met	Val	Gly	Asn	Leu	Gly	Met	
35					40					45						
Ile	Val	Leu	Ile	Lys	Ile	Asp	Leu	Cys	Leu	His	Thr	Pro	Met	Tyr	Phe	
50					55					60						
Phe	Leu	Ser	Ser	Leu	Ser	Phe	Val	Asp	Ala	Ser	Tyr	Ser	Ser	Ser	Val	
65					70					75					80	
Thr	Pro	Lys	Met	Leu	Val	Asn	Leu	Met	Ala	Glu	Asn	Lys	Ala	Ile	Ser	
85					90					95						
Phe	His	Gly	Cys	Ala	Ala	Gln	Phe	Tyr	Phe	Phe	Gly	Ser	Phe	Leu	Gly	
100					105					110						
Thr	Glu	Cys	Phe	Leu	Leu	Ala	Met	Met	Ala	Tyr	Asp	Arg	Tyr	Ala	Ala	
115					120					125						
Ile	Trp	Asn	Pro	Leu	Leu	Tyr	Pro	Val	Leu	Val	Ser	Gly	Arg	Ile	Cys	
130					135					140						
Phe	Leu	Leu	Ile	Ala	Thr	Ser	Phe	Leu	Ala	Gly	Cys	Gly	Asn	Ala	Ala	
145					150					155					160	
Ile	His	Thr	Gly	Met	Thr	Phe	Arg	Leu	Ser	Phe	Cys	Gly	Ser	Asn	Arg	
165					170					175						
Ile	Asn	His	Phe	Tyr	Cys	Asp	Thr	Pro	Pro	Leu	Leu	Lys	Leu	Ser	Cys	
180					185					190						
Ser	Asp	Thr	His	Phe	Asn	Gly	Ile	Val	Ile	Met	Ala	Phe	Ser	Ser	Phe	
195					200					205						
Ile	Val	Ile	Ser	Cys	Val	Met	Ile	Val	Leu	Ile	Ser	Tyr	Leu	Cys	Ile	
210					215					220						
Phe	Ile	Ala	Val	Leu	Lys	Met	Pro	Ser	Leu	Glu	Gly	Arg	His	Lys	Ala	
225					230					235					240	
Phe	Ser	Thr	Cys	Ala	Ser	Tyr	Leu	Met	Ala	Val	Thr	Ile	Phe	Phe	Gly	
245					250					255						
Thr	Ile	Leu	Phe	Met	Tyr	Leu	Arg	Pro	Thr	Ser	Ser	Tyr	Ser	Met	Glu	
260					265					270						
Gln	Asp	Lys	Val	Val	Ser	Val	Phe	Tyr	Thr	Val	Ile	Ile	Pro	Val	Leu	
275					280					285						
Asn	Pro	Leu	Ile	Tyr	Ser	Leu	Lys	Asn	Lys	Asp	Val	Lys	Lys	Ala	Leu	
290					295					300						
Lys	Lys	Ile	Leu	Trp	Lys	His	Ile	Leu								
305					310											

<210> 82

<211> 311
 <212> PRT
 <213> Canis familiaris

<400> 82
 Met Asp Gly Lys Asn Cys Ser Ser Val Asn Glu Phe Leu Leu Val Gly
 1 5 10 15
 Ile Ser Asn Lys Pro Gly Val Lys Val Thr Leu Phe Ile Thr Phe Leu
 20 25 30
 Ile Val Tyr Leu Ile Ile Leu Val Ala Asn Leu Gly Met Ile Ile Leu
 35 40 45
 Ile Arg Met Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 His Leu Ser Phe Ser Asp Ala Arg Tyr Ser Thr Ala Val Gly Pro Arg
 65 70 75 80
 Met Leu Val Gly Phe Ile Ala Lys Asn Lys Ser Ile Pro Phe Tyr Ser
 85 90 95
 Cys Ala Met Gln Trp Leu Val Phe Cys Thr Phe Val Asp Ser Glu Cys
 100 105 110
 Leu Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser His
 115 120 125
 Pro Leu Leu Tyr Thr Val Ser Met Ser Ser Arg Val Cys Ser Leu Leu
 130 135 140
 Met Ala Gly Val Tyr Leu Val Gly Ile Met Asp Ala Ser Val Asn Thr
 145 150 155 160
 Ile Leu Thr Phe Arg Leu Cys Phe Cys Glu Ser Asn Val Ile Asn His
 165 170 175
 Phe Phe Cys Asp Val Pro Pro Leu Leu Leu Leu Ser Cys Ser Asp Thr
 180 185 190
 Gln Val Asn Glu Leu Val Ile Phe Thr Ile Phe Gly Phe Ile Glu Leu
 195 200 205
 Ile Thr Leu Ser Gly Leu Phe Val Ser Tyr Cys Tyr Ile Ile Leu Ala
 210 215 220
 Val Arg Lys Ile Asn Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr
 225 230 235 240
 Cys Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Met Leu
 245 250 255
 Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
 260 265 270
 Ile Ile Ser Leu Phe Tyr Ser Leu Val Ile Pro Met Leu Asn Pro Leu

275 280 285
 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Lys Lys Leu
 290 295 300

 Lys Asn Lys Lys Trp Phe His
 305 310

 <210> 83
 <211> 254
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artifical Sequence: Domain

 <400> 83
 Gly Asn Leu Leu Val Ile Leu Val Ile Leu Arg Thr Lys Lys Leu Arg
 1 5 10 15

 Thr Pro Thr Asn Ile Phe Leu Leu Asn Leu Ala Val Ala Asp Leu Leu
 20 25 30

 Phe Leu Leu Thr Leu Pro Pro Trp Ala Leu Tyr Tyr Leu Val Gly Gly
 35 40 45

 Asp Trp Val Phe Gly Asp Ala Leu Cys Lys Leu Val Gly Ala Leu Phe
 50 55 60

 Val Val Asn Gly Tyr Ala Ser Ile Leu Leu Leu Thr Ala Ile Ser Ile
 65 70 75 80

 Asp Arg Tyr Leu Ala Ile Val His Pro Leu Arg Tyr Arg Arg Ile Arg
 85 90 95

 Thr Pro Arg Arg Ala Lys Val Leu Ile Leu Leu Val Trp Val Leu Ala
 100 105 110

 Leu Leu Leu Ser Leu Pro Pro Leu Leu Phe Ser Trp Leu Arg Thr Val
 115 120 125

 Glu Glu Gly Asn Thr Thr Val Cys Leu Ile Asp Phe Pro Glu Glu Ser
 130 135 140

 Val Lys Arg Ser Tyr Val Leu Leu Ser Thr Leu Val Gly Phe Val Leu
 145 150 155 160

 Pro Leu Leu Val Ile Leu Val Cys Tyr Thr Arg Ile Leu Arg Thr Leu
 165 170 175

 Arg Lys Arg Ala Arg Ser Gln Arg Ser Leu Lys Arg Arg Ser Ser Ser
 180 185 190

 Glu Arg Lys Ala Ala Lys Met Leu Leu Val Val Val Val Val Phe Val
 195 200 205

 Leu Cys Trp Leu Pro Tyr His Ile Val Leu Leu Leu Asp Ser Leu Cys

210	215	220
Leu Leu Ser Ile Trp Arg Val Leu Pro Thr Ala Leu Leu Ile Thr Leu		
225	230	235 240
Trp Leu Ala Tyr Val Asn Ser Cys Leu Asn Pro Ile Ile Tyr		
	245	250
<210> 84		
<211> 313		
<212> PRT		
<213> Homo sapiens		
<400> 84		
Met Glu Lys Arg Asn Leu Thr Val Val Arg Glu Phe Val Leu Leu Gly		
1	5	10 15
Leu Pro Ser Ser Ala Glu Gln Gln His Leu Leu Ser Val Leu Phe Leu		
	20	25 30
Cys Met Tyr Leu Ala Thr Thr Leu Gly Asn Met Leu Ile Ile Ala Thr		
	35	40 45
Ile Gly Phe Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Ser		
	50	55 60
Asn Leu Ala Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Gln		
	65	70 75 80
Met Val Val Asn Ile Leu Thr Gly Thr Lys Thr Ile Ser Phe Ala Gly		
	85	90 95
Cys Leu Thr Gln Leu Phe Phe Phe Val Ser Phe Val Asn Met Asp Ser		
	100	105 110
Leu Leu Leu Cys Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His		
	115	120 125
Pro Leu His Tyr Thr Ala Arg Met Asn Leu Cys Leu Cys Val Gln Leu		
	130	135 140
Val Ala Gly Leu Trp Leu Val Thr Tyr Leu His Ala Leu Leu His Thr		
	145	150 155 160
Val Leu Ile Ala Gln Leu Ser Phe Cys Ala Ser Asn Ile Ile His His		
	165	170 175
Phe Leu Cys Asp Leu Asn Pro Leu Leu Gln Leu Ser Cys Ser Asp Val		
	180	185 190
Ser Phe Asn Val Met Ile Ile Phe Ala Val Gly Asp Leu Leu Ala Leu		
	195	200 205
Thr Pro Leu Val Cys Ile Leu Val Ser Tyr Gly Leu Ile Phe Ser Thr		
	210	215 220
Val Leu Lys Ile Thr Ser Thr Gln Gly Lys Gln Arg Ala Val Ser Thr		

225 230 235 240
 Cys Ser Cys His Leu Ser Val Val Val Leu Phe Tyr Gly Thr Ala Ile
 245 250 255
 Ala Val Tyr Phe Ser Pro Ser Ser Pro His Met Pro Glu Ser Asp Thr
 260 265 270
 Leu Ser Thr Ile Met Tyr Ser Met Val Ala Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Thr Leu Arg Asn Arg Asp Met Lys Arg Gly Leu Gln Lys Met
 290 295 300
 Leu Leu Lys Cys Thr Val Phe Gln Gln
 305 310

 <210> 85
 <211> 216
 <212> PRT
 <213> Homo sapiens

 <400> 85
 Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Gln Met Val Val
 1 5 10 15
 Asn Ile Leu Thr Gly Thr Lys Thr Ile Ser Phe Ala Gly Cys Leu Thr
 20 25 30
 Gln Leu Phe Phe Phe Val Ser Phe Val Asn Met Asp Ser Leu Leu Leu
 35 40 45
 Cys Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His
 50 55 60
 Tyr Thr Ala Arg Met Asn Leu Cys Leu Cys Val Gln Leu Val Ala Gly
 65 70 75 80
 Leu Trp Leu Val Thr Tyr Leu His Ala Leu Leu His Thr Val Leu Ile
 85 90 95
 Ala Gln Leu Ser Phe Cys Ala Ser Asn Ile Ile His His Phe Leu Cys
 100 105 110
 Asp Leu Asn Pro Leu Leu Gln Leu Ser Cys Ser Asp Val Ser Phe Asn
 115 120 125
 Val Met Ile Ile Phe Ala Val Gly Asp Leu Leu Ala Leu Thr Pro Leu
 130 135 140
 Val Cys Ile Leu Val Ser Tyr Gly Leu Ile Phe Ser Thr Val Leu Lys
 145 150 155 160
 Ile Thr Ser Thr Gln Gly Lys Gln Arg Ala Val Ser Thr Cys Ser Cys
 165 170 175
 His Leu Ser Val Val Val Leu Phe Tyr Gly Thr Ala Ile Ala Val Tyr

180	185	190
Phe Ser Pro Ser Ser Pro His Met Pro Glu Ser Asp Thr Leu Ser Thr		
195	200	205
Ile Met Tyr Ser Met Val Ala Pro		
210	215	
<210> 86		
<211> 312		
<212> PRT		
<213> Homo sapiens		
<400> 86		
Met Ser Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Leu Gly		
1	5	10 15
Leu Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val Phe Phe Leu		
20	25	30
Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ser		
35	40	45
Val Ser Ile Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser		
50	55	60
Asn Leu Ser Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys		
65	70	75 80
Met Leu Ala Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly		
85	90	95
Cys Leu Thr Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn		
100	105	110
Phe Leu Leu Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His		
115	120	125
Pro Leu His Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu		
130	135	140
Val Ala Gly Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr		
145	150	155 160
Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His		
165	170	175
Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr		
180	185	190
His Leu Asn Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile		
195	200	205
Thr Pro Phe Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr		
210	215	220
Val Leu Lys Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr		

225 230 235 240
 Cys Gly Ser His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile
 245 250 255
 Ala Val Tyr Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr
 260 265 270
 Met Ala Thr Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285
 Ile Tyr Ser Leu Arg Asn Arg Tyr Leu Lys Gly Ala Leu Lys Lys Val
 290 295 300
 Val Gly Arg Val Val Phe Ser Val
 305 310

 <210> 87
 <211> 312
 <212> PRT
 <213> Homo sapiens

 <400> 87
 Met Ser Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Leu Gly
 1 5 10 15
 Leu Ser Arg Gln Pro Gln Gln Gln His Leu Leu Phe Val Phe Phe Leu
 20 25 30
 Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ser
 35 40 45
 Val Ser Ile Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60
 Asn Leu Ser Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys
 65 70 75 80
 Met Leu Ala Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly
 85 90 95
 Cys Leu Thr Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn
 100 105 110
 Phe Leu Leu Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His
 115 120 125
 Pro Leu His Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu
 130 135 140
 Val Ala Gly Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr
 145 150 155 160
 Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His
 165 170 175
 Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asn Thr

	180		185		190										
His	Leu	Asn	Glu	Val	Ile	Ile	Leu	Ser	Glu	Gly	Ala	Leu	Val	Met	Ile
	195						200					205			
Thr	Pro	Phe	Leu	Cys	Ile	Leu	Ala	Ser	Tyr	Met	His	Ile	Thr	Cys	Thr
	210					215					220				
Val	Leu	Lys	Val	Pro	Ser	Thr	Lys	Gly	Arg	Trp	Lys	Ala	Phe	Ser	Thr
225					230					235					240
Cys	Gly	Ser	His	Leu	Ala	Val	Val	Leu	Leu	Phe	Tyr	Ser	Thr	Ile	Ile
				245					250					255	
Ala	Val	Tyr	Phe	Asn	Pro	Leu	Ser	Ser	His	Ser	Ala	Glu	Lys	Asp	Thr
			260					265					270		
Met	Ala	Thr	Val	Leu	Tyr	Thr	Val	Val	Thr	Pro	Met	Leu	Asn	Pro	Phe
	275						280					285			
Ile	Tyr	Ser	Leu	Arg	Asn	Arg	Tyr	Leu	Lys	Gly	Ala	Leu	Lys	Lys	Val
	290					295					300				
Ile	Gly	Arg	Val	Val	Phe	Ser	Val								
305					310										

<210> 88
 <211> 313
 <212> PRT
 <213> Rattus norvegicus

<400> 88

Met	Ser	Ser	Thr	Asn	Gln	Ser	Ser	Val	Thr	Glu	Phe	Leu	Leu	Leu	Gly
1				5					10					15	
Leu	Ser	Arg	Gln	Pro	Gln	Gln	Gln	Gln	Leu	Leu	Phe	Leu	Leu	Phe	Leu
			20					25					30		
Ile	Met	Tyr	Leu	Ala	Thr	Val	Leu	Gly	Asn	Leu	Leu	Ile	Ile	Leu	Ala
	35						40					45			
Ile	Gly	Thr	Asp	Ser	Arg	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Ser
	50					55					60				
Asn	Leu	Ser	Phe	Val	Asp	Val	Cys	Phe	Ser	Ser	Thr	Thr	Val	Pro	Lys
65					70					75					80
Val	Leu	Ala	Asn	His	Ile	Leu	Gly	Ser	Gln	Ala	Ile	Ser	Phe	Ser	Gly
				85					90					95	
Cys	Leu	Thr	Gln	Leu	Tyr	Phe	Leu	Ala	Val	Phe	Gly	Asn	Met	Asp	Asn
			100					105					110		
Phe	Leu	Leu	Ala	Val	Met	Ser	Tyr	Asp	Arg	Phe	Val	Ala	Ile	Cys	His
	115						120					125			
Pro	Leu	His	Tyr	Thr	Thr	Lys	Met	Thr	Arg	Gln	Leu	Cys	Val	Leu	Leu

130		135		140
Val Val Gly Ser Trp	Val Val Ala Asn Met	Asn Cys Leu Leu His Ile		
145	150	155		160
Leu Leu Met Ala Arg	Leu Ser Phe Cys Ala Asp	Asn Met Ile Pro His		
	165	170		175
Phe Phe Cys Asp Gly Thr	Pro Leu Leu Lys Leu Ser Cys	Ser Asp Thr		
	180	185		190
His Leu Asn Glu Leu Met	Ile Leu Thr Glu Gly Ala Val Val Met Val			
	195	200		205
Thr Pro Phe Val Cys Ile	Leu Ile Ser Tyr Ile His Ile Thr Cys Ala			
	210	215		220
Val Leu Arg Val Ser Ser	Pro Arg Gly Gly Trp Lys Ser Phe Ser Thr			
	225	230		235
Cys Gly Ser His Leu Ala Val Val	Cys Leu Phe Tyr Gly Thr Val Ile			
	245	250		255
Ala Val Tyr Phe Asn Pro Ser Ser	Ser His Leu Ala Gly Arg Asp Met			
	260	265		270
Ala Ala Ala Val Met Tyr Ala Val Val Thr	Pro Met Leu Asn Pro Phe			
	275	280		285
Ile Tyr Ser Leu Arg Asn Ser Asp Met	Lys Ala Ala Leu Arg Lys Val			
	290	295		300
Leu Ala Met Arg Phe Pro Ser Lys Gln				
305	310			

<210> 89
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 89
Met Lys Arg Gln Asn Gln Ser Cys Val Val Glu Phe Ile Leu Leu Gly
1 5 10 15
Phe Ser Asn Phe Pro Glu Leu Gln Val Gln Leu Phe Gly Val Phe Leu
20 25 30
Val Ile Tyr Val Val Thr Leu Met Gly Asn Ala Ile Ile Thr Val Ile
35 40 45
Ile Ser Leu Asn Gln Ser Leu His Val Pro Met Tyr Leu Phe Leu Leu
50 55 60
Asn Leu Ser Val Val Glu Val Ser Phe Ser Ala Val Ile Thr Pro Glu
65 70 75 80
Met Leu Val Val Leu Ser Thr Glu Lys Thr Met Ile Ser Phe Val Gly

35					40					45					
Val	Ser	Leu	Asp	Gln	Ser	Leu	His	Val	Pro	Met	Tyr	Leu	Phe	Leu	Leu
50					55					60					
Asn	Leu	Ser	Val	Val	Asp	Leu	Ser	Phe	Ser	Ala	Val	Ile	Met	Pro	Glu
65					70					75					80
Met	Leu	Val	Val	Leu	Ser	Thr	Glu	Lys	Thr	Thr	Ile	Ser	Phe	Gly	Gly
				85					90					95	
Cys	Phe	Ala	Gln	Met	Tyr	Phe	Ile	Leu	Leu	Phe	Gly	Gly	Ala	Glu	Cys
			100					105					110		
Phe	Leu	Leu	Gly	Ala	Met	Ala	Tyr	Asp	Arg	Phe	Ala	Ala	Ile	Cys	His
	115						120						125		
Pro	Leu	Asn	Tyr	Gln	Met	Ile	Met	Asn	Lys	Gly	Val	Phe	Met	Lys	Leu
	130					135					140				
Ile	Ile	Phe	Ser	Trp	Ala	Leu	Gly	Phe	Met	Leu	Gly	Thr	Val	Gln	Thr
145					150					155					160
Ser	Trp	Val	Ser	Ser	Phe	Pro	Phe	Cys	Gly	Leu	Asn	Glu	Ile	Asn	His
				165					170					175	
Ile	Ser	Cys	Glu	Thr	Pro	Ala	Val	Leu	Glu	Leu	Ala	Cys	Ala	Asp	Thr
			180					185					190		
Phe	Leu	Phe	Glu	Ile	Tyr	Ala	Phe	Thr	Gly	Thr	Phe	Leu	Ile	Ile	Leu
	195						200					205			
Val	Pro	Phe	Leu	Leu	Ile	Leu	Leu	Ser	Tyr	Ile	Arg	Val	Leu	Phe	Ala
	210					215					220				
Ile	Leu	Lys	Met	Pro	Ser	Thr	Thr	Gly	Arg	Gln	Lys	Ala	Phe	Ser	Thr
225					230					235					240
Cys	Ala	Ala	His	Leu	Thr	Ser	Val	Thr	Leu	Phe	Tyr	Gly	Thr	Ala	Ser
			245						250					255	
Met	Thr	Tyr	Leu	Gln	Pro	Lys	Ser	Gly	Tyr	Ser	Pro	Glu	Thr	Lys	Lys
			260					265					270		
Val	Met	Ser	Leu	Ser	Tyr	Ser	Leu	Leu	Thr	Pro	Leu	Leu	Asn	Leu	Leu
	275						280					285			
Ile	Tyr	Ser	Leu	Arg	Asn	Ser	Glu	Met	Lys	Arg	Ala	Leu	Met	Lys	Leu
	290					295					300				
Trp	Arg	Arg	Arg	Val	Val	Leu	His	Thr	Ile						
305					310										

<210> 91
 <211> 217
 <212> PRT
 <213> Homo sapiens

<400> 91
Val Val Glu Val Ser Phe Ser Ala Val Ile Thr Pro Glu Met Leu Val
1 5 10 15
Val Leu Ser Thr Glu Lys Thr Met Ile Ser Phe Val Gly Cys Phe Ala
20 25 30
Gln Met Tyr Phe Ile Leu Leu Phe Gly Gly Thr Glu Cys Phe Leu Leu
35 40 45
Gly Ala Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu Asn
50 55 60
Tyr Pro Val Ile Met Asn Arg Gly Val Phe Met Lys Leu Val Ile Phe
65 70 75 80
Ser Trp Ile Ser Gly Ile Met Val Ala Thr Val Gln Thr Thr Trp Val
85 90 95
Phe Ser Phe Pro Phe Cys Gly Pro Asn Glu Ile Asn His Leu Phe Cys
100 105 110
Glu Thr Pro Pro Val Leu Glu Leu Val Cys Ala Asp Thr Phe Leu Phe
115 120 125
Glu Ile Tyr Ala Phe Thr Gly Thr Ile Leu Ile Val Met Val Pro Phe
130 135 140
Leu Leu Ile Leu Leu Ser Tyr Ile Arg Val Leu Phe Ala Ile Leu Lys
145 150 155 160
Met Pro Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser
165 170 175
His Leu Thr Ser Val Thr Leu Phe Tyr Gly Thr Ala Asn Met Thr Tyr
180 185 190
Leu Gln Pro Lys Ser Gly Tyr Ser Pro Glu Thr Lys Lys Leu Ile Ser
195 200 205
Leu Ala Tyr Thr Leu Leu Thr Pro Leu
210 215
<210> 92
<211> 317
<212> PRT
<213> Homo sapiens

<400> 92
Met Ala Ile Gly Asn Trp Thr Glu Ile Ser Glu Phe Ile Leu Met Ser
1 5 10 15
Phe Ser Ser Leu Pro Thr Glu Ile Gln Ser Leu Leu Phe Leu Thr Phe
20 25 30
Leu Thr Ile Tyr Leu Val Thr Leu Lys Gly Asn Ser Leu Ile Ile Leu

35					40					45					
Val	Thr	Leu	Ala	Asp	Pro	Met	Leu	His	Ser	Pro	Met	Tyr	Phe	Phe	Leu
50						55					60				
Arg	Asn	Leu	Ser	Phe	Leu	Glu	Ile	Gly	Phe	Asn	Leu	Val	Ile	Val	Pro
65					70					75					80
Lys	Met	Leu	Gly	Thr	Leu	Leu	Ala	Gln	Asp	Thr	Thr	Ile	Ser	Phe	Leu
				85					90					95	
Gly	Cys	Ala	Thr	Gln	Met	Tyr	Phe	Phe	Phe	Phe	Gly	Val	Ala	Glu	
			100					105				110			
Cys	Phe	Leu	Leu	Ala	Thr	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Ile	Cys
		115					120					125			
Ser	Pro	Leu	His	Tyr	Pro	Val	Ile	Met	Asn	Gln	Arg	Thr	Arg	Ala	Lys
		130					135					140			
Leu	Ala	Ala	Ala	Ser	Trp	Phe	Pro	Gly	Phe	Pro	Val	Ala	Thr	Val	Gln
145						150					155				160
Thr	Thr	Trp	Leu	Phe	Ser	Phe	Pro	Phe	Cys	Gly	Thr	Asn	Lys	Val	Asn
			165						170					175	
His	Phe	Phe	Cys	Asp	Ser	Pro	Pro	Val	Leu	Lys	Leu	Val	Cys	Ala	Asp
			180					185					190		
Thr	Ala	Leu	Phe	Glu	Ile	Tyr	Ala	Ile	Val	Gly	Thr	Ile	Leu	Val	Val
		195					200					205			
Met	Ile	Pro	Cys	Leu	Leu	Ile	Leu	Cys	Ser	Tyr	Thr	Arg	Ile	Ala	Ala
	210					215					220				
Ala	Ile	Leu	Lys	Ile	Pro	Ser	Ala	Lys	Gly	Lys	His	Lys	Ala	Phe	Ser
225						230					235				240
Thr	Cys	Ser	Ser	His	Leu	Leu	Val	Val	Ser	Leu	Phe	Tyr	Ile	Ser	Ser
				245					250					255	
Ser	Leu	Thr	Tyr	Phe	Trp	Pro	Lys	Ser	Asn	Asn	Ser	Pro	Glu	Ser	Lys
			260					265					270		
Lys	Leu	Leu	Ser	Leu	Ser	Tyr	Thr	Val	Val	Thr	Pro	Met	Leu	Asn	Pro
		275					280					285			
Ile	Ile	Tyr	Ser	Leu	Arg	Asn	Ser	Glu	Val	Lys	Asn	Ala	Leu	Ser	Arg
	290					295					300				
Thr	Phe	His	Lys	Val	Leu	Ala	Leu	Arg	Asn	Cys	Ile	Pro			
305						310					315				

<210> 93
 <211> 315
 <212> PRT
 <213> Mus musculus

<400> 93

Met	Thr	Trp	Gly	Asn	Trp	Thr	Thr	Val	Arg	Glu	Phe	Ile	Leu	Met	Ser	
1				5					10					15		
Phe	Ser	Ser	Leu	Ser	Tyr	Glu	Val	Gln	Ala	Leu	Leu	Phe	Leu	Leu	Phe	
			20					25					30			
Leu	Ile	Ile	Tyr	Leu	Val	Thr	Leu	Met	Gly	Asn	Val	Leu	Ile	Ile	Leu	
		35					40					45				
Val	Thr	Thr	Ala	Asp	Ser	Ala	Leu	Gln	Ser	Pro	Met	Tyr	Phe	Phe	Leu	
	50					55					60					
Arg	Asn	Leu	Ser	Phe	Leu	Glu	Ile	Gly	Phe	Asn	Leu	Val	Ile	Val	Pro	
65					70					75					80	
Lys	Met	Leu	Ser	Thr	Leu	Ile	Leu	Gln	Asp	Lys	Thr	Ile	Ser	Phe	Leu	
				85					90					95		
Gly	Cys	Ala	Thr	Gln	Met	Tyr	Phe	Phe	Phe	Phe	Phe	Gly	Ala	Ala	Glu	
			100					105					110			
Cys	Cys	Leu	Leu	Ala	Thr	Met	Ala	Tyr	Asp	Arg	Tyr	Met	Ala	Ile	Cys	
		115					120					125				
Asp	Pro	Leu	His	Tyr	Pro	Ile	Ile	Met	Ser	Arg	Arg	Ser	Cys	Ala	Gln	
	130					135					140					
Leu	Ala	Ala	Ala	Ser	Trp	Phe	Ser	Gly	Phe	Pro	Val	Ala	Thr	Val	Gln	
145					150					155					160	
Thr	Thr	Trp	Ile	Phe	Ser	Phe	Pro	Phe	Cys	Gly	Pro	Asn	Met	Val	Asn	
			165						170					175		
His	Phe	Phe	Cys	Asp	Ser	Pro	Pro	Val	Ile	Ala	Leu	Val	Cys	Ala	Asp	
			180					185					190			
Thr	Ser	Leu	Phe	Glu	Leu	Glu	Ala	Leu	Thr	Ala	Thr	Val	Leu	Phe	Ile	
		195					200					205				
Leu	Phe	Pro	Phe	Leu	Leu	Ile	Leu	Gly	Ser	Tyr	Val	Arg	Ile	Leu	Ser	
	210					215					220					
Thr	Ile	Phe	Arg	Met	Pro	Ser	Ala	Glu	Gly	Lys	Arg	Lys	Ala	Phe	Ser	
225					230					235					240	
Thr	Cys	Ser	Ser	His	Leu	Leu	Val	Val	Ser	Leu	Phe	Tyr	Ser	Thr	Ala	
				245					250					255		
Ile	Leu	Thr	Tyr	Phe	Arg	Pro	Arg	Ser	Asn	Thr	Ser	Pro	Glu	Asn	Lys	
			260					265					270			
Lys	Met	Leu	Ser	Leu	Ser	Tyr	Thr	Val	Ile	Thr	Pro	Met	Leu	Asn	Pro	
		275					280					285				
Ile	Ile	Tyr	Ser	Leu	Arg	Asn	Asn	Glu	Val	Lys	Ala	Ala	Leu	Arg	Arg	

290 295 300
 Ile Ile His Arg Thr Leu Gly Pro Gln Lys Leu
 305 310 315

 <210> 94
 <211> 313
 <212> PRT
 <213> Homo sapiens

 <400> 94
 Met Pro Ile Ala Asn Asp Thr Gln Phe His Thr Ser Ser Phe Leu Leu
 1 5 10 15

 Leu Gly Ile Pro Gly Leu Glu Asp Val His Ile Trp Ile Gly Phe Pro
 20 25 30

 Phe Phe Ser Val Tyr Leu Ile Ala Leu Leu Gly Asn Ala Ala Ile Phe
 35 40 45

 Phe Val Ile Gln Thr Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Cys
 50 55 60

 Leu Ala Met Leu Asp Ser Ile Asp Leu Ser Leu Ser Thr Ala Thr Ile
 65 70 75 80

 Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Ile Lys Glu Ile Ser Phe
 85 90 95

 Gly Gly Tyr Leu Ser Gln Met Phe Phe Ile His Phe Phe Thr Val Met
 100 105 110

 Glu Ser Ile Val Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile
 115 120 125

 Cys Lys Pro Leu Trp Tyr Thr Met Ile Leu Thr Ser Lys Ile Ile Ser
 130 135 140

 Leu Ile Ala Gly Ile Ala Val Leu Arg Ser Leu Tyr Met Val Ile Pro
 145 150 155 160

 Leu Val Phe Leu Leu Leu Arg Leu Pro Phe Cys Gly His Arg Ile Ile
 165 170 175

 Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala
 180 185 190

 Ser Ile Lys Val Asn Ile Met Phe Gly Leu Gly Ser Ile Ser Leu Leu
 195 200 205

 Leu Leu Asp Val Leu Leu Ile Ile Leu Ser His Ile Arg Ile Leu Tyr
 210 215 220

 Ala Val Phe Cys Leu Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu Asn
 225 230 235 240

 Thr Cys Gly Ser His Ile Gly Val Ile Leu Ala Phe Ser Thr Pro Ala

	245		250		255
Phe Phe Ser Phe Phe Thr His Cys Phe Gly His Asp Ile Pro Gln Tyr	260		265		270
Ile His Ile Phe Leu Ala Asn Leu Tyr Val Val Val Pro Pro Thr Leu	275		280		285
Asn Pro Val Ile Tyr Gly Val Arg Thr Lys His Ile Arg Glu Thr Val	290		295		300
Leu Arg Ile Phe Phe Lys Thr Asp His	305		310		
<210> 95					
<211> 340					
<212> PRT					
<213> Homo sapiens					
<400> 95					
Met Glu Ser Ile Val Leu Leu Val Met Gly Phe Asp Arg Tyr Val Ala	1	5	10		15
Ile Cys Asn Pro Phe Arg Ile Leu Cys Thr Val Phe His Leu Pro Ser		20	25		30
Gln Glu Ala His Leu Lys Ala Leu Asn Thr Cys Ser Ser His Ile Cys		35	40		45
Val Ile Leu Ala Phe Phe Gly Pro Ala Leu Phe Ser Phe Leu Thr His		50	55		60
Arg Phe Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Gln Glu Arg Thr		65	70		75
Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu Asp		85	90		95
Ser Ile Asp Leu Gly Leu Ser Thr Ala Thr Ile Pro Lys Met Leu Gly		100	105		110
Ile Phe Trp Phe Asn Thr Lys Glu Ile Ser Phe Gly Gly Cys Leu Ser		115	120		125
His Met Phe Phe Ile His Phe Phe Thr Ala Met Glu Ser Ile Val Leu		130	135		140
Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu Arg		145	150		155
Tyr Thr Met Ile Leu Thr Ser Lys Ile Ile Ser Leu Ile Ala Gly Ile		165	170		175
Ala Val Leu Arg Ser Leu Tyr Met Val Val Pro Leu Val Phe Leu Leu		180	185		190
Leu Arg Leu Pro Phe Cys Gly His Arg Ile Ile Pro His Thr Tyr Cys					

195	200	205
Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala Ser Ile Lys Val Asn 210 215 220		
Ile Arg Phe Gly Leu Gly Asn Ile Ser Leu Leu Leu Leu Asp Val Ile 225 230 235 240		
Leu Ile Ile Leu Ser Tyr Val Arg Ile Leu Tyr Ala Val Phe Cys Leu 245 250 255		
Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu Asn Thr Cys Gly Ser His 260 265 270		
Ile Gly Val Ile Leu Ala Phe Phe Thr Pro Ala Phe Phe Ser Phe Leu 275 280 285		
Thr His Arg Phe Gly His Asn Ile Pro Gln Tyr Ile His Ile Ile Leu 290 295 300		
Ala Asn Leu Tyr Val Val Val Pro Pro Ala Leu Asn Pro Val Ile Tyr 305 310 315 320		
Gly Val Arg Thr Lys Gln Ile Arg Glu Arg Val Leu Arg Ile Phe Leu 325 330 335		
Lys Thr Asn His 340		

<210> 96
 <211> 327
 <212> PRT
 <213> Homo sapiens

<400> 96
 Met Leu His Thr Asn Asn Thr Gln Phe His Pro Ser Thr Phe Leu Val
 1 5 10 15
 Val Gly Val Pro Gly Leu Glu Asp Val His Val Trp Ile Gly Phe Pro
 20 25 30
 Phe Phe Ala Val Tyr Leu Thr Ala Leu Leu Gly Asn Ile Ile Ile Leu
 35 40 45
 Phe Val Ile Gln Thr Glu Gln Ser Leu His Gln Pro Met Phe Tyr Phe
 50 55 60
 Leu Ala Met Leu Ala Gly Thr Asp Leu Gly Leu Ser Thr Ala Thr Ile
 65 70 75 80
 Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Gly Glu Ile Ala Phe
 85 90 95
 Gly Ala Cys Ile Thr Gln Met Tyr Thr Ile His Ile Cys Thr Gly Leu
 100 105 110
 Glu Ser Val Val Leu Thr Val Thr Gly Ile Asp Arg Tyr Ile Ala Ile

115	120	125
Cys Asn Pro Leu Arg Tyr Ser Met Ile Leu Thr Asn Lys Val Ile Ala		
130	135	140
Ile Leu Gly Ile Val Ile Ile Val Arg Thr Leu Val Phe Val Thr Pro		
145	150	155 160
Phe Thr Phe Leu Thr Leu Arg Leu Pro Phe Cys Gly Val Arg Ile Ile		
	165 170	175
Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Lys Leu Ala Cys Ala		
	180 185	190
Ser Ile Asn Val Ile Tyr Gly Leu Ile Ala Phe Ser Val Gly Tyr Ile		
	195 200	205
Asp Ile Ser Val Ile Gly Phe Ser Tyr Val Gln Ile Leu Arg Ala Val		
	210 215	220
Phe His Leu Pro Ala Trp Asp Ala Arg Leu Lys Ala Leu Ser Thr Cys		
	225 230	235 240
Gly Ser His Val Cys Val Met Leu Ala Phe Tyr Leu Pro Ala Leu Phe		
	245 250	255
Ser Phe Met Thr His Arg Phe Gly His Asn Ile Pro His Tyr Ile His		
	260 265	270
Ile Leu Leu Ala Asn Leu Tyr Val Val Phe Pro Pro Ala Leu Asn Ser		
	275 280	285
Val Ile Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Gln Val Leu Arg		
	290 295	300
Ile Leu Asn Pro Lys Ser Phe Trp His Phe Asp Pro Lys Arg Ile Phe		
	305 310	315 320
His Asn Asn Ser Val Arg Gln		
	325	

<210> 97
 <211> 325
 <212> PRT
 <213> Homo sapiens

<400> 97
 Met Phe Leu Pro Asn Asp Thr Gln Phe His Pro Ser Ser Phe Leu Leu
 1 5 10 15
 Leu Gly Ile Pro Gly Leu Glu Thr Leu His Ile Trp Ile Gly Phe Pro
 20 25 30
 Phe Cys Ala Val Tyr Met Ile Ala Leu Ile Gly Asn Phe Thr Ile Leu
 35 40 45
 Leu Val Ile Lys Thr Asp Ser Ser Leu His Gln Pro Met Phe Tyr Phe

50	55	60
Leu Ala Met Leu Ala Thr Thr Asp Val Gly Leu Ser Thr Ala Thr Ile 65 70 75 80		
Pro Lys Met Leu Gly Ile Phe Trp Ile Asn Leu Arg Gly Ile Ile Phe 85 90 95		
Glu Ala Cys Leu Thr Gln Met Phe Phe Ile His Asn Phe Thr Leu Met 100 105 110		
Glu Ser Ala Val Leu Val Ala Met Ala Tyr Asp Ser Tyr Val Ala Ile 115 120 125		
Cys Asn Pro Leu Gln Tyr Ser Ala Ile Leu Thr Asn Lys Val Val Ser 130 135 140		
Val Ile Gly Leu Gly Val Phe Val Arg Ala Leu Ile Phe Val Ile Pro 145 150 155 160		
Ser Ile Leu Leu Ile Leu Arg Leu Pro Phe Cys Gly Asn His Val Ile 165 170 175		
Pro His Thr Tyr Cys Glu His Met Gly Leu Ala His Leu Ser Cys Ala 180 185 190		
Ser Ile Lys Ile Asn Ile Ile Tyr Gly Leu Cys Ala Ile Cys Asn Leu 195 200 205		
Val Phe Asp Ile Thr Val Ile Ala Leu Ser Tyr Val His Ile Leu Cys 210 215 220		
Ala Val Phe Arg Leu Pro Thr His Glu Ala Arg Leu Lys Ser Leu Ser 225 230 235 240		
Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Tyr Thr Pro Ala 245 250 255		
Leu Phe Ser Phe Met Thr His Cys Phe Gly Arg Asn Val Pro Arg Tyr 260 265 270		
Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Val Pro Pro Met Leu 275 280 285		
Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Tyr Lys Cys Val 290 295 300		
Lys Lys Ile Leu Leu Gln Glu Gln Gly Met Glu Lys Glu Glu Tyr Leu 305 310 315 320		
Ile His Thr Arg Phe 325		

<210> 98
 <211> 318
 <212> PRT
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (286)..(286)
 <223> Wherein Xaa may be any naturally occurring amino acid

 <400> 98
 Met Ser Pro Gly Asn Ser Ser Trp Ile His Pro Ser Ser Phe Leu Leu
 1 5 10 15

 Leu Gly Ile Pro Gly Leu Glu Glu Leu Gln Phe Trp Leu Gly Leu Pro
 20 25 30

 Phe Gly Thr Val Tyr Leu Ile Ala Val Leu Gly Asn Val Ile Ile Leu
 35 40 45

 Phe Val Ile Tyr Leu Glu His Ser Leu His Gln Pro Met Phe Tyr Leu
 50 55 60

 Leu Ala Ile Leu Ala Val Thr Asp Leu Gly Leu Ser Thr Ala Thr Val
 65 70 75 80

 Pro Arg Ala Leu Gly Ile Phe Trp Phe Gly Phe His Lys Ile Ala Phe
 85 90 95

 Arg Asp Cys Val Ala Gln Met Phe Phe Ile His Leu Phe Thr Gly Ile
 100 105 110

 Glu Thr Phe Met Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile
 115 120 125

 Cys Asn Pro Leu Arg Tyr Asn Thr Ile Leu Thr Asn Arg Thr Ile Cys
 130 135 140

 Ile Ile Val Gly Val Gly Leu Phe Lys Asn Phe Ile Leu Val Phe Pro
 145 150 155 160

 Leu Ile Phe Leu Ile Leu Arg Leu Ser Phe Cys Gly His Asn Ile Ile
 165 170 175

 Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Val
 180 185 190

 Ser Ile Lys Val Asn Val Leu Phe Gly Leu Ile Leu Ile Ser Met Ile
 195 200 205

 Leu Leu Asp Val Val Leu Ser Ala Leu Ser Tyr Ala Lys Ile Leu His
 210 215 220

 Ala Val Phe Lys Leu Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu Asn
 225 230 235 240

 Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Phe Thr Pro Ala
 245 250 255

 Phe Phe Ser Phe Leu Thr His Arg Phe Gly His Asn Ile Pro Arg Tyr
 260 265 270

Ile His Ile Leu Leu Ala Asn Leu Tyr Val Ile Ile Pro Xaa Ala Leu
 275 280 285

Asn Pro Ile Ile Tyr Gly Val Arg Thr Lys Gln Ile Gln Asp Arg Ala
 290 295 300

Val Thr Ile Leu Cys Asn Glu Val Gly Gln Leu Ala Asp Asp
 305 310 315

<210> 99
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 99
 Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
 1 5 10 15

Asn Phe Leu Ser Glu Thr Lys Val Ile Ser Tyr Val Gly Cys Leu Ala
 20 25 30

Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp Ser Tyr Leu Leu
 35 40 45

Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
 50 55 60

Tyr Asp Val Val Met Lys Pro Arg His Cys Leu Leu Met Leu Leu Gly
 65 70 75 80

Ser Cys Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
 85 90 95

Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys His Phe Phe Cys
 100 105 110

Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
 115 120 125

Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
 130 135 140

Leu Cys Ile Ile Phe Ser Tyr Leu Arg Ile Met Val Thr Val Leu Arg
 145 150 155 160

Ile Pro Ser Ala Ala Gly Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175

His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser Ile Ile Tyr Val Tyr
 180 185 190

Phe Arg Pro Leu Ser Met Tyr Ser Val Val Arg Asp Arg Val Ala Thr
 195 200 205

Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 100
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 100
 Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
 1 5 10 15
 Asn Phe Leu Ser Glu Thr Lys Ile Ile Ser Tyr Val Gly Cys Leu Ile
 20 25 30
 Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp Ser Tyr Leu Leu
 35 40 45
 Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
 50 55 60
 Tyr Asp Val Val Met Lys Pro Trp His Cys Leu Leu Met Leu Leu Gly
 65 70 75 80
 Ser Cys Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
 85 90 95
 Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys His Phe Phe Cys
 100 105 110
 Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
 115 120 125
 Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
 130 135 140
 Leu Cys Thr Ile Phe Ser Tyr Leu Gln Ile Ile Val Thr Val Leu Arg
 145 150 155 160
 Ile Pro Ser Ala Ala Arg Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Val Leu Phe Tyr Gly Ser Val Ile Tyr Val Tyr
 180 185 190
 Phe Arg Pro Leu Ser Met Tyr Ser Val Met Lys Gly Arg Val Ala Thr
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 101
 <211> 216
 <212> PRT
 <213> Callithrix jacchus

<400> 101
 Phe Thr Asp Ile Cys Phe Thr Thr Val Ile Val Pro Arg Met Leu Val
 1 5 10 15

Asn Phe Leu Ser Gly Thr Lys Val Ile Pro Tyr Met Gly Cys Leu Val
 20 25 30
 Gln Met Tyr Phe Phe Met Ala Phe Gly Asn Thr Asp Ser Tyr Leu Leu
 35 40 45
 Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
 50 55 60
 Tyr Asp Val Ala Met Asn Pro Arg His Cys Leu Leu Met Leu Leu Gly
 65 70 75 80
 Ser Cys Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
 85 90 95
 Ser His Leu Ser Phe Cys Ala Ser His Val Ile Lys His Phe Phe Cys
 100 105 110
 Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
 115 120 125
 Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
 130 135 140
 Leu Cys Ile Ile Phe Ser Tyr Leu Arg Ile Ile Ile Thr Val Leu Arg
 145 150 155 160
 Ile Pro Phe Ala Ala Gly Lys Trp Arg Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Ala Leu Phe Tyr Gly Ser Ile Tyr Tyr Val Tyr
 180 185 190
 Phe Arg Pro Leu Ser Met Tyr Ser Val Val Lys Asp Arg Val Ala Thr
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215

<210> 102

<211> 216

<212> PRT

<213> Callithrix jacchus

<400> 102

Phe Thr Asp Ile Cys Phe Thr Thr Val Ile Val Pro Arg Met Leu Val
 1 5 10 15

Asn Phe Leu Ser Glu Thr Lys Val Ile Ser Tyr Met Gly Cys Leu Val
 20 25 30

Pro Met Tyr Phe Phe Met Ala Phe Ala Asn Thr Asp Ser Tyr Leu Leu
 35 40 45

Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Asn Pro Leu His
 50 55 60

Tyr Asp Val Ala Met Asn Ser Arg Arg Cys Leu Leu Met Leu Leu Gly
 65 70 75 80
 Ser Cys Ser Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
 85 90 95
 Ser Arg Leu Ser Phe Cys Ala Ser His Val Ile Lys His Phe Phe Cys
 100 105 110
 Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
 115 120 125
 Gln Met Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
 130 135 140
 Leu Cys Ile Ile Phe Ser Tyr Leu Arg Ile Ile Ile Thr Val Leu Arg
 145 150 155 160
 Ile Pro Ser Ala Ala Gly Lys Trp Arg Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Ala Leu Phe Tyr Gly Ser Ile Ile Tyr Val Tyr
 180 185 190
 Phe Arg Pro Leu Ser Met Tyr Ser Val Val Lys Asp Arg Val Ala Thr
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215
 <210> 103
 <211> 216
 <212> PRT
 <213> Eulemur rubriventer
 <400> 103
 Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val Pro Lys Met Leu Val
 1 5 10 15
 Asn Phe Leu Ser Glu Thr Lys Ala Ile Ser Tyr Val Gly Cys Leu Val
 20 25 30
 Gln Met Tyr Phe Phe Met Ala Leu Ala Asn Thr Asp Ser Tyr Leu Leu
 35 40 45
 Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile Cys Lys Pro Phe His
 50 55 60
 Tyr Asp Val Val Met Ser Pro Arg Arg Cys Leu Leu Met Leu Leu Gly
 65 70 75 80
 Ser Cys Thr Ile Ser His Leu His Ser Leu Phe Arg Val Leu Leu Met
 85 90 95
 Ser Arg Leu Ser Phe Cys Ala Ser His Ile Ile Lys His Phe Phe Cys
 100 105 110

Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser Asp Thr Ser Ser Ser
 115 120 125
 Gln Ile Val Val Met Thr Glu Thr Leu Ala Val Ile Val Thr Pro Phe
 130 135 140
 Leu Cys Ile Ile Phe Ser Tyr Leu Arg Ile Ile Ile Thr Val Leu Ala
 145 150 155 160
 Ile Pro Ser Ala Ala Gly Lys Trp Lys Ala Phe Ser Thr Cys Gly Ser
 165 170 175
 His Leu Thr Val Val Val Leu Phe Tyr Gly Ser Val Ile Tyr Val Tyr
 180 185 190
 Phe Arg Pro Leu Ser Met Tyr Ser Val Met Lys Asp Arg Val Ala Thr
 195 200 205
 Val Met Tyr Thr Val Val Thr Pro
 210 215
 <210> 104
 <211> 910
 <212> PRT
 <213> Homo sapiens
 <400> 104
 Met Ile Thr Pro Cys Gln Thr Pro Asp Asp Phe Val Ala Ala Thr Ser
 1 5 10 15
 Pro Gly His Ile Ile Ile Gly Gly Leu Phe Ala Ile His Glu Lys Met
 20 25 30
 Leu Ser Ser Glu Asp Ser Pro Arg Arg Pro Gln Ile Gln Glu Cys Val
 35 40 45
 Gly Phe Glu Ile Ser Val Phe Leu Gln Thr Leu Ala Met Ile His Ser
 50 55 60
 Ile Glu Met Ile Asn Asn Ser Thr Leu Leu Pro Gly Val Lys Leu Gly
 65 70 75 80
 Tyr Glu Ile Tyr Asp Thr Cys Thr Glu Val Thr Val Ala Met Ala Ala
 85 90 95
 Thr Leu Arg Phe Leu Ser Lys Phe Asn Cys Ser Arg Glu Thr Val Glu
 100 105 110
 Phe Lys Cys Asp Tyr Ser Ser Tyr Met Pro Arg Val Lys Ala Val Ile
 115 120 125
 Gly Ser Gly Tyr Ser Glu Ile Thr Met Ala Val Ser Arg Met Leu Asn
 130 135 140
 Leu Gln Leu Met Pro Gln Val Gly Tyr Glu Ser Thr Ala Glu Ile Leu
 145 150 155 160

Ser Asp Lys Ile Arg Phe Pro Ser Phe Leu Arg Thr Val Pro Ser Asp
 165 170 175
 Phe His Gln Ile Lys Ala Met Ala His Leu Ile Gln Lys Ser Gly Trp
 180 185 190
 Asn Trp Ile Gly Ile Ile Thr Thr Asp Asp Asp Tyr Gly Arg Leu Ala
 195 200 205
 Leu Asn Thr Phe Ile Ile Gln Ala Glu Ala Asn Asn Val Cys Ile Ala
 210 215 220
 Phe Lys Glu Val Leu Pro Ala Phe Leu Ser Asp Asn Thr Ile Glu Val
 225 230 235 240
 Arg Ile Asn Arg Thr Leu Lys Lys Ile Ile Leu Glu Ala Gln Val Asn
 245 250 255
 Val Ile Val Val Phe Leu Arg Gln Phe His Val Phe Asp Leu Phe Asn
 260 265 270
 Lys Ala Ile Glu Met Asn Ile Asn Lys Met Trp Ile Ala Ser Asp Asn
 275 280 285
 Trp Ser Thr Ala Thr Lys Ile Thr Thr Ile Pro Asn Val Lys Lys Ile
 290 295 300
 Gly Lys Val Val Gly Phe Ala Phe Arg Arg Gly Asn Ile Ser Ser Phe
 305 310 315 320
 His Ser Phe Leu Gln Asn Leu His Leu Leu Pro Ser Asp Ser His Lys
 325 330 335
 Leu Leu His Glu Tyr Ala Met His Leu Ser Ala Cys Ala Tyr Val Lys
 340 345 350
 Asp Thr Asp Leu Ser Gln Cys Ile Phe Asn His Ser Gln Arg Thr Leu
 355 360 365
 Ala Tyr Lys Ala Asn Lys Ala Ile Glu Arg Asn Phe Val Met Arg Asn
 370 375 380
 Asp Phe Leu Trp Asp Tyr Ala Glu Pro Gly Leu Ile His Ser Ile Gln
 385 390 395 400
 Leu Ala Val Phe Ala Leu Gly Tyr Ala Ile Arg Asp Leu Cys Gln Ala
 405 410 415
 Arg Asp Cys Gln Asn Pro Asn Ala Phe Gln Pro Trp Glu Leu Leu Gly
 420 425 430
 Val Leu Lys Asn Val Thr Phe Thr Asp Gly Trp Asn Ser Phe His Phe
 435 440 445
 Asp Ala His Gly Asp Leu Asn Thr Gly Tyr Asp Val Val Leu Trp Lys
 450 455 460

Glu	Ile	Asn	Gly	His	Met	Thr	Val	Thr	Lys	Met	Ala	Glu	Tyr	Asp	Leu	
465					470					475					480	
Gln	Asn	Asp	Val	Phe	Ile	Ile	Pro	Asp	Gln	Glu	Thr	Lys	Asn	Glu	Phe	
				485					490					495		
Arg	Asn	Leu	Lys	Gln	Ile	Gln	Ser	Lys	Cys	Ser	Lys	Glu	Cys	Ser	Pro	
			500					505					510			
Gly	Gln	Met	Lys	Lys	Thr	Thr	Arg	Ser	Gln	His	Ile	Cys	Cys	Tyr	Glu	
		515					520					525				
Cys	Gln	Asn	Cys	Pro	Glu	Asn	His	Tyr	Thr	Asn	Gln	Thr	Asp	Met	Pro	
	530					535					540					
His	Cys	Leu	Leu	Cys	Asn	Asn	Lys	Thr	His	Trp	Ala	Pro	Val	Arg	Ser	
545					550					555					560	
Thr	Met	Cys	Phe	Glu	Lys	Glu	Val	Glu	Tyr	Leu	Asn	Trp	Asn	Asp	Ser	
			565						570					575		
Leu	Ala	Ile	Leu	Leu	Leu	Ile	Leu	Ser	Leu	Leu	Gly	Ile	Ile	Phe	Val	
			580					585					590			
Leu	Val	Val	Gly	Ile	Ile	Phe	Thr	Arg	Asn	Leu	Asn	Thr	Pro	Val	Val	
		595					600					605				
Lys	Ser	Ser	Gly	Gly	Leu	Arg	Val	Cys	Tyr	Val	Ile	Leu	Leu	Cys	His	
	610					615					620					
Phe	Leu	Asn	Phe	Ala	Ser	Thr	Ser	Phe	Phe	Ile	Gly	Glu	Pro	Gln	Asp	
625					630					635					640	
Phe	Thr	Cys	Lys	Thr	Arg	Gln	Thr	Met	Phe	Gly	Val	Ser	Phe	Thr	Leu	
				645					650					655		
Cys	Ile	Ser	Cys	Ile	Leu	Thr	Lys	Ser	Leu	Lys	Ile	Leu	Leu	Ala	Phe	
			660					665					670			
Ser	Phe	Asp	Pro	Lys	Leu	Gln	Lys	Phe	Leu	Lys	Cys	Leu	Tyr	Arg	Pro	
		675					680					685				
Ile	Leu	Ile	Ile	Phe	Thr	Cys	Thr	Gly	Ile	Gln	Val	Val	Ile	Cys	Thr	
	690					695					700					
Leu	Trp	Leu	Ile	Phe	Ala	Ala	Pro	Thr	Val	Glu	Val	Asn	Val	Ser	Leu	
705					710					715					720	
Pro	Arg	Val	Ile	Ile	Leu	Glu	Cys	Glu	Glu	Gly	Ser	Ile	Leu	Ala	Phe	
				725					730					735		
Gly	Thr	Met	Leu	Gly	Tyr	Ile	Ala	Ile	Leu	Ala	Phe	Ile	Cys	Phe	Ile	
		740					745						750			
Phe	Ala	Phe	Lys	Gly	Lys	Tyr	Glu	Asn	Tyr	Asn	Glu	Ala	Lys	Phe	Ile	
		755					760					765				

Thr Phe Gly Met Leu Ile Tyr Phe Ile Ala Trp Ile Thr Phe Ile Pro
 770 775 780

Ile Tyr Ala Thr Thr Phe Gly Lys Tyr Val Pro Ala Val Glu Ile Ile
 785 790 795 800

Val Ile Leu Ile Ser Asn Tyr Gly Ile Leu Tyr Cys Thr Phe Ile Pro
 805 810 815

Lys Cys Tyr Val Ile Ile Cys Lys Gln Glu Ile Asn Thr Lys Ser Ala
 820 825 830

Phe Leu Lys Met Ile Tyr Ser Tyr Ser Ser His Ser Val Ser Ser Ile
 835 840 845

Ala Leu Ser Pro Ala Ser Leu Asp Ser Met Ser Gly Asn Val Thr Met
 850 855 860

Thr Asn Pro Ser Ser Ser Gly Lys Ser Ala Thr Trp Gln Lys Ser Lys
 865 870 875 880

Asp Leu Gln Ala Gln Ala Phe Ala His Ile Cys Arg Glu Asn Ala Thr
 885 890 895

Ser Val Ser Lys Thr Leu Pro Arg Lys Arg Met Ser Ser Ile
 900 905 910

<210> 105

<211> 877

<212> PRT

<213> Carassius auratus

<400> 105

Met Ala Gly Leu Asp Leu Ser Leu Val Leu Met Leu Ser Val Leu Ala
 1 5 10 15

Gly Val Arg Glu Val Ser Leu Thr Gln Val Asn Gln Gln Gly Val Ile
 20 25 30

Ala Pro Gly Asp Ile Ile Ile Gly Gly Leu Phe Pro Ile His Glu Ala
 35 40 45

Ala Glu Ala Val Asn Phe Thr Gly Leu Asn Ser Phe Ser Ser Phe Gln
 50 55 60

His Pro Val Cys Asn Arg Tyr Tyr Thr Lys Gly Leu Asn Gln Ala Leu
 65 70 75 80

Ala Met Ile His Ala Val Glu Met Ala Asn Gln Ser Pro Met Leu Ser
 85 90 95

Ser Leu Asn Leu Thr Leu Gly Tyr Arg Ile Tyr Asp Thr Cys Ser Asp
 100 105 110

Val Thr Thr Ala Leu Trp Ala Val Gln Asp Leu Thr Arg Pro Tyr Ser
 115 120 125

Tyr	Cys	Asp	Ser	Gln	Thr	Asn	Ser	Ser	Gln	Pro	Val	Gln	Pro	Ile	Met	130	135	140	
Ala	Val	Ile	Gly	Pro	Ser	Ser	Ser	Glu	Ile	Ser	Ile	Ala	Val	Ala	Arg	145	150	155	160
Glu	Leu	Asn	Leu	Leu	Met	Ile	Pro	Gln	Ile	Ser	Tyr	Ala	Ser	Thr	Ala	165	170	175	
Thr	Ile	Leu	Ser	Asp	Lys	Ser	Arg	Phe	Pro	Ala	Phe	Met	Arg	Thr	Val	180	185	190	
Pro	Asn	Asp	Glu	Tyr	Gln	Thr	His	Ala	Met	Val	Gln	Leu	Leu	Lys	Asp	195	200	205	
Asn	Lys	Trp	Thr	Trp	Val	Gly	Ile	Ile	Ile	Thr	Asp	Gly	Asp	Tyr	Gly	210	215	220	
Arg	Ser	Ala	Met	Glu	Ser	Phe	Val	Lys	His	Thr	Glu	Arg	Glu	Gly	Ile	225	230	235	240
Cys	Val	Ala	Phe	Lys	Val	Ile	Leu	Pro	Asp	Ser	Leu	Ala	Asp	Glu	Gln	245	250	255	
Lys	Leu	Asn	Ile	His	Ile	Asn	Glu	Thr	Val	Asp	Ile	Ile	Glu	Lys	Asn	260	265	270	
Thr	Lys	Val	Asn	Val	Val	Val	Ser	Phe	Ala	Lys	Ser	Ser	Gln	Met	Lys	275	280	285	
Leu	Leu	Tyr	Glu	Gly	Leu	Arg	Ser	Arg	Asn	Val	Pro	Lys	Asn	Lys	Val	290	295	300	
Trp	Val	Ala	Ser	Asp	Asn	Trp	Ser	Thr	Ser	Lys	Asn	Ile	Leu	Lys	Asp	305	310	315	320
Val	Asn	Leu	Ser	Asp	Ile	Gly	Asn	Ile	Leu	Gly	Phe	Thr	Phe	Lys	Ser	325	330	335	
Gly	Asn	Val	Thr	Ala	Phe	Leu	Gln	Tyr	Leu	Lys	Asp	Leu	Lys	Phe	Gly	340	345	350	
Ser	Glu	Ala	Lys	Met	Asn	Asn	Ser	Phe	Leu	Glu	Glu	Phe	Leu	Lys	Leu	355	360	365	
Pro	Glu	Ile	Gly	Asn	Ala	Ala	Asn	Ala	Val	Gln	Glu	Gln	Ile	Lys	Asn	370	375	380	
Thr	His	Leu	Asp	Met	Val	Phe	Ser	Val	Gln	Met	Ala	Val	Ser	Ala	Ile	385	390	395	400
Ala	Lys	Ala	Val	Val	Glu	Leu	Cys	Val	Glu	Arg	Gln	Cys	Lys	Thr	Pro	405	410	415	
Ser	Ala	Ile	Gln	Pro	Trp	Glu	Leu	Leu	Lys	Gln	Leu	Arg	Asn	Val	Thr	420	425	430	

Phe	Glu	Lys	Glu	Gly	Val	Met	Tyr	Asn	Phe	Asp	Ala	Asn	Gly	Asp	Ile	435	440	445	
Asn	Leu	Gly	Tyr	Asp	Val	Cys	Leu	Trp	Asp	Asp	Asp	Glu	Ser	Glu	Lys	450	455	460	
Asn	Asp	Ile	Ile	Ala	Glu	Tyr	Tyr	Pro	Ser	Asn	Ser	Ser	Phe	Thr	Phe	465	470	475	480
Thr	Arg	Lys	Asn	Leu	Ser	Asn	Ile	Glu	Asn	Val	Leu	Ser	Lys	Cys	Ser	485	490	495	
Asp	Ser	Cys	Gln	Pro	Gly	Glu	Tyr	Lys	Lys	Thr	Ala	Glu	Gly	Gln	His	500	505	510	
Thr	Cys	Cys	Tyr	Glu	Cys	Leu	Ala	Cys	Ala	Glu	Asn	Gln	Tyr	Ser	Asn	515	520	525	
His	Thr	Asp	Ala	Asp	Thr	Cys	Ser	Lys	Cys	Asp	Thr	Glu	Ser	Leu	Trp	530	535	540	
Ser	Asn	Ala	Asn	Ser	Ser	Lys	Cys	Tyr	Pro	Lys	Phe	Tyr	Glu	Tyr	Phe	545	550	555	560
Glu	Trp	Asn	Ser	Gly	Phe	Ala	Ile	Ala	Leu	Leu	Thr	Leu	Ala	Ala	Leu	565	570	575	
Gly	Ile	Leu	Leu	Leu	Ile	Ser	Met	Ser	Ala	Leu	Phe	Phe	Trp	Gln	Arg	580	585	590	
Asn	Ser	Leu	Val	Val	Lys	Ala	Ala	Gly	Gly	Pro	Leu	Cys	His	Leu	Ile	595	600	605	
Leu	Phe	Ser	Leu	Leu	Gly	Ser	Phe	Ile	Ser	Val	Ile	Phe	Phe	Val	Gly	610	615	620	
Glu	Pro	Ser	Asn	Glu	Ser	Cys	Arg	Val	Arg	Gln	Val	Ile	Phe	Gly	Leu	625	630	635	640
Ser	Phe	Thr	Leu	Cys	Val	Ser	Cys	Ile	Leu	Val	Lys	Ser	Leu	Lys	Ile	645	650	655	
Leu	Leu	Ala	Phe	Gln	Met	Asn	Leu	Glu	Leu	Lys	Glu	Leu	Leu	Arg	Lys	660	665	670	
Leu	Tyr	Lys	Pro	Tyr	Val	Ile	Val	Cys	Met	Cys	Met	Gly	Leu	Gln	Val	675	680	685	
Thr	Ile	Cys	Thr	Leu	Trp	Leu	Thr	Leu	His	Arg	Pro	Phe	Ile	Glu	Lys	690	695	700	
Val	Val	Gln	Pro	Lys	Ser	Ile	Leu	Leu	Glu	Cys	Asn	Glu	Gly	Ser	Asp	705	710	715	720
Leu	Met	Phe	Gly	Leu	Met	Leu	Gly	Tyr	Ile	Val	Leu	Leu	Ala	Leu	Ile	725	730	735	

Cys Phe Thr Phe Ala Tyr Lys Gly Arg Lys Leu Pro Gln Lys Tyr Asn
 740 745 750
 Glu Ala Lys Phe Ile Thr Phe Gly Met Leu Ile Tyr Leu Met Ala Trp
 755 760 765
 Val Ile Phe Ile Pro Val His Val Thr Thr Ser Gly Lys Tyr Val Pro
 770 775 780
 Ala Val Glu Val Val Val Ile Leu Ile Ser Asn Tyr Gly Ile Leu Ser
 785 790 795 800
 Cys His Phe Leu Pro Lys Cys Tyr Ile Ile Ile Phe Lys Lys Glu Tyr
 805 810 815
 Asn Thr Lys Asp Ala Phe Leu Lys Asn Val Phe Glu Tyr Ala Arg Lys
 820 825 830
 Ser Ser Glu Asn Ile Arg Gly Leu Ser Gly Thr Asp Pro His Ser Lys
 835 840 845
 Thr Asp Asn Ser Val Tyr Val Ile Ser Asn Pro Ser Leu Val Pro Glu
 850 855 860
 Glu Lys Gln Val Ser Val Pro Glu Ile Asp Asn Val Leu
 865 870 875
 <210> 106
 <211> 940
 <212> PRT
 <213> Takifugu rubripes
 <400> 106
 Met Val Arg Leu Val Leu His Tyr Leu Ile Leu Leu Gly Ser Gly Tyr
 1 5 10 15
 Val Ile Ser Thr Tyr Gly Pro Asn Gln Arg Ala Gln Met Thr Gly Asp
 20 25 30
 Ile Leu Leu Gly Gly Leu Phe Pro Ile His Phe Gly Ile Ser Ser Lys
 35 40 45
 Asp Glu Asn Leu Ala Ala Arg Pro Glu Ser Thr Lys Cys Val Arg Phe
 50 55 60
 Asn Phe Arg Gly Phe Arg Trp Leu Gln Ala Met Val Phe Ala Ile Glu
 65 70 75 80
 Glu Ile Asn Asn Ser Ser Ser Leu Leu Pro Asn Ile Thr Leu Gly Tyr
 85 90 95
 Arg Ile Phe Asp Thr Cys Asn Thr Val Ser Lys Ala Leu Glu Ala Thr
 100 105 110
 Leu Ser Phe Val Ala Gln Asn Lys Ile Asp Ser Leu Asn Leu Asp Glu
 115 120 125

Phe	Cys	Asn	Cys	Thr	Asp	His	Ile	Pro	Ala	Thr	Ile	Ala	Val	Val	Gly	
130						135					140					
Ala	Ala	Gly	Ser	Ala	Val	Ser	Thr	Ala	Val	Ala	Asn	Leu	Leu	Ser	Leu	
145					150					155					160	
Phe	Tyr	Ile	Pro	Gln	Ile	Ser	Tyr	Ala	Ser	Ser	Ser	Arg	Leu	Leu	Ser	
				165					170					175		
Asn	Lys	Asn	Gln	Tyr	Lys	Ser	Phe	Met	Arg	Thr	Ile	Pro	Thr	Asp	Glu	
			180					185					190			
His	Gln	Ala	Thr	Ala	Met	Ala	Asp	Val	Ile	Glu	Tyr	Phe	Gln	Trp	Asn	
	195						200					205				
Trp	Val	Ile	Ala	Val	Ala	Ser	Asp	Asp	Asp	Tyr	Gly	Arg	Pro	Gly	Ile	
	210					215					220					
Glu	Lys	Phe	Glu	Lys	Glu	Met	Glu	Glu	Arg	Asp	Ile	Cys	Ile	His	Leu	
225					230					235					240	
Asn	Glu	Leu	Ile	Ser	Gln	Tyr	Phe	Glu	Asp	Cys	Glu	Ile	Lys	Ala	Leu	
				245					250					255		
Val	Asp	Arg	Ile	Glu	Asn	Ser	Thr	Ala	Lys	Val	Ile	Val	Val	Phe	Ala	
	260							265					270			
Ser	Gly	Pro	Asp	Ile	Glu	Pro	Leu	Ile	Lys	Glu	Met	Val	Arg	Arg	Asn	
	275						280					285				
Ile	Thr	Asp	Arg	Ile	Trp	Leu	Ala	Ser	Glu	Ala	Trp	Ala	Ser	Ser	Ser	
	290					295					300					
Leu	Ile	Ala	Lys	Pro	Glu	Tyr	Leu	Asp	Val	Val	Glu	Gly	Thr	Ile	Gly	
305					310					315					320	
Phe	Val	Leu	Lys	Ala	Gly	Asn	Ile	Pro	Gly	Phe	Arg	Glu	Phe	Leu	Gln	
				325					330					335		
Gln	Val	Gln	Pro	Lys	Arg	Gly	Ser	His	Asn	Glu	Phe	Val	Arg	Glu	Phe	
			340					345					350			
Trp	Glu	Glu	Thr	Phe	Asn	Cys	Tyr	Leu	Glu	Asp	Ser	Pro	Arg	Leu	Gln	
	355						360					365				
Glu	Ser	Glu	Asn	Gly	Ser	Asp	Ser	Phe	Arg	Pro	Leu	Cys	Thr	Ser	Glu	
	370					375					380					
Glu	Asp	Ile	Thr	Ser	Val	Glu	Thr	Pro	Tyr	Leu	Asp	His	Thr	His	Leu	
385					390					395					400	
Arg	Ile	Ser	Tyr	Asn	Val	Tyr	Val	Ala	Val	Tyr	Ser	Ile	Ala	His	Ala	
				405					410					415		
Leu	Gln	Asp	Ile	Leu	Ser	Cys	Thr	Pro	Gly	His	Gly	Leu	Phe	Ala	Asn	
			420					425					430			

Asn	Ser	Cys	Ala	Asp	Ile	Lys	Lys	Met	Glu	Ala	Trp	Gln	Val	Leu	Lys	435	440	445	
Gln	Leu	Arg	His	Leu	Asn	Tyr	Thr	Asn	Ser	Met	Gly	Glu	Lys	Val	His	450	455	460	
Phe	Asp	Glu	Asn	Ala	Asp	Met	Glu	Ala	Asn	Tyr	Thr	Ile	Ile	Asn	Trp	465	470	475	480
His	Arg	Ser	Ala	Glu	Asp	Gly	Ser	Val	Ala	Phe	Arg	Glu	Val	Gly	Tyr	485	490	495	
Tyr	His	Met	His	Ala	Arg	Arg	Gly	Ala	Lys	Leu	Leu	Ile	Asp	Asn	Thr	500	505	510	
Lys	Met	Met	Trp	Asn	Ala	Tyr	Ser	Ser	Glu	Val	Pro	Phe	Ser	Asn	Cys	515	520	525	
Ser	Glu	Asp	Cys	Glu	Pro	Gly	Thr	Arg	Lys	Gly	Ile	Ile	Asp	Ser	Met	530	535	540	
Pro	Thr	Cys	Cys	Phe	Glu	Cys	Thr	Glu	Cys	Ser	Asp	Gly	Glu	Tyr	Ser	545	550	555	560
Asp	His	Lys	Asp	Ala	Ser	Ile	Cys	Thr	Lys	Cys	Pro	Asn	Asn	Ser	Trp	565	570	575	
Ser	Ser	Gly	Asn	His	Thr	Phe	Cys	Phe	Leu	Lys	Glu	Ile	Glu	Phe	Leu	580	585	590	
Ala	Trp	Ser	Glu	Pro	Phe	Gly	Ile	Ala	Leu	Ala	Ile	Cys	Ala	Val	Leu	595	600	605	
Gly	Val	Leu	Leu	Thr	Ala	Phe	Val	Met	Gly	Val	Phe	Val	Arg	Phe	Arg	610	615	620	
Asn	Thr	Pro	Ile	Val	Lys	Ala	Ser	Asn	Arg	Glu	Leu	Ser	Tyr	Val	Leu	625	630	635	640
Leu	Leu	Ser	Leu	Ile	Cys	Cys	Phe	Ser	Ser	Ser	Leu	Ile	Phe	Ile	Gly	645	650	655	
Glu	Pro	Gln	Asp	Trp	Thr	Cys	Arg	Leu	Arg	Gln	Pro	Ala	Phe	Gly	Ile	660	665	670	
Ser	Phe	Val	Leu	Cys	Ile	Ser	Cys	Ile	Leu	Val	Lys	Thr	Asn	Arg	Val	675	680	685	
Leu	Leu	Val	Phe	Glu	Ala	Lys	Ile	Pro	Thr	Ser	Ile	His	Arg	Lys	Trp	690	695	700	
Trp	Gly	Leu	Asn	Leu	Gln	Phe	Leu	Leu	Val	Phe	Leu	Cys	Thr	Phe	Val	705	710	715	720
Gln	Val	Met	Ile	Cys	Val	Val	Trp	Leu	Tyr	Asn	Ala	Pro	Pro	Ser	Ser	725	730	735	

Tyr Arg Asn His Asp Ile Asp Glu Ile Ile Phe Ile Thr Cys Asn Glu
740 745 750

Gly Ser Val Met Ala Leu Gly Phe Leu Ile Gly Tyr Thr Cys Leu Leu
755 760 765

Ala Ala Ile Cys Phe Phe Phe Ala Phe Lys Ser Arg Lys Leu Pro Glu
770 775 780

Asn Phe Thr Glu Ala Lys Phe Ile Thr Phe Cys Met Leu Ile Phe Phe
785 790 795 800

Ile Val Trp Ile Ser Phe Ile Pro Ala Tyr Phe Ser Thr Tyr Gly Lys
805 810 815

Phe Val Ser Ala Val Glu Ala Ile Ala Ile Leu Ala Ser Ser Tyr Gly
820 825 830

Met Leu Ala Cys Ile Phe Phe Asn Lys Val Tyr Ile Ile Leu Phe Lys
835 840 845

Pro Cys Arg Asn Thr Ile Glu Glu Val Arg Cys Ser Thr Ala Ala His
850 855 860

Ala Phe Arg Val Ala Ala Lys Ala Thr Leu Lys His Arg Thr Thr Val
865 870 875 880

Arg Lys Lys Ser Asn Ser Ile Gly Ser Thr Ala Ser Thr Pro Ser Ser
885 890 895

Ser Ile Ser Leu Lys Thr Asn Ser Asn Asp Cys Asp Ser Ala Ser Gly
900 905 910

Arg His Arg Pro Arg Val Ser Phe Gly Ser Gly Thr Val Met Leu Ser
915 920 925

Leu Ser Phe Glu Glu Ser Arg Arg Ser Ser Leu Met
930 935 940

<210> 107

<211> 940

<212> PRT

<213> Sparus aurata

<400> 107

Met Arg Leu Val Leu Tyr Tyr Leu Ile Leu Leu Gly Ser Ser Tyr Val
1 5 10 15

Ile Ser Thr Tyr Gly Pro His Gln Arg Ala Gln Met Thr Gly Asp Ile
20 25 30

Leu Leu Gly Gly Leu Phe Pro Ile His Phe Gly Val Ala Ser Lys Asp
35 40 45

Gln Asp Leu Ala Ala Arg Pro Glu Ser Ser Gln Cys Val Arg Phe Asn
50 55 60

Phe Arg Gly Phe Arg Trp Leu Gln Ala Met Ile Phe Ala Ile Asp Glu
65 70 75 80
Ile Asn Asn Ser Ser Thr Leu Leu Pro Asn Ile Thr Leu Gly Tyr Arg
85 90 95
Ile Phe Asp Thr Cys Asn Thr Val Ser Lys Ala Leu Glu Ala Thr Leu
100 105 110
Ser Phe Val Ala Gln Asn Lys Ile Asp Ser Leu Asn Leu Asp Glu Phe
115 120 125
Cys Asn Cys Thr Asp His Ile Pro Ala Thr Ile Ala Val Val Gly Ala
130 135 140
Ala Gly Ser Ala Val Ser Thr Ala Val Ala Asn Leu Leu Gly Leu Phe
145 150 155 160
Tyr Ile Pro Gln Ile Ser Tyr Ala Ser Ser Ser Arg Leu Leu Ser Asn
165 170 175
Lys Asn Gln Tyr Lys Ser Phe Met Arg Thr Ile Pro Thr Asp Glu Tyr
180 185 190
Gln Ala Thr Ala Met Ala Asp Ile Ile Glu Phe Phe Gln Trp Asn Trp
195 200 205
Val Ser Ala Val Ala Ser Asp Asp Asp Tyr Gly Arg Pro Gly Val Glu
210 215 220
Lys Phe Glu Lys Glu Met Glu Glu Arg Asp Ile Cys Ile His Leu Asn
225 230 235 240
Glu Leu Ile Ser Gln Tyr Phe Glu Asp His Glu Ile Gln Ala Leu Ala
245 250 255
Asp Arg Ile Glu Asn Ser Thr Ala Lys Val Ile Val Val Phe Ala Ser
260 265 270
Gly Pro Asp Ile Glu Pro Leu Ile Lys Glu Met Val Arg Arg Asn Ile
275 280 285
Thr Asp Arg Ile Trp Leu Ala Ser Glu Ala Trp Ser Ser Ser Ser Leu
290 295 300
Ile Ala Lys Pro Glu Tyr Leu Asp Val Val Ala Gly Thr Ile Gly Phe
305 310 315 320
Ala Leu Lys Ala Gly His Ile Pro Gly Phe Arg Glu Phe Leu Gln Gln
325 330 335
Val Gln Pro Lys Lys Asp Ser His Asn Glu Phe Val Arg Glu Phe Trp
340 345 350
Glu Glu Thr Phe Asn Cys Tyr Leu Glu Asp Ser Pro Arg Leu Gln Glu
355 360 365

Ser Glu Asn Gly Ser Thr Ser Phe Arg Pro Leu Cys Thr Gly Glu Glu
 370 375 380
 Asp Ile Thr Ser Val Glu Thr Pro Tyr Leu Asp Tyr Thr His Leu Arg
 385 390 395 400
 Ile Ser Tyr Asn Val Tyr Val Ala Val Tyr Ser Ile Ala Gln Ala Leu
 405 410 415
 Gln Asp Ile Leu Thr Cys Thr Pro Gly Gln Gly Leu Phe Ala Asn Asn
 420 425 430
 Ser Cys Ala Asp Ile Lys Lys Met Glu Ala Trp Gln Val Leu Lys Gln
 435 440 445
 Leu Arg His Leu Asn Tyr Thr Asn Ser Met Gly Glu Lys Met His Phe
 450 455 460
 Asp Glu Asn Ala Asp Leu Ala Ala Asn Tyr Thr Leu Ile Asn Trp His
 465 470 475 480
 Arg Ser Ala Glu Asp Gly Ser Val Val Phe Glu Glu Val Gly Tyr Tyr
 485 490 495
 Asn Met His Ala Lys Arg Gly Gly Lys Leu Phe Ile Asp Asn Thr Lys
 500 505 510
 Ile Leu Trp Asn Gly Phe Ser Ser Glu Val Pro Phe Ser Asn Cys Ser
 515 520 525
 Glu Asp Cys Glu Pro Gly Thr Arg Lys Gly Ile Ile Asp Ser Met Pro
 530 535 540
 Thr Cys Cys Phe Glu Cys Thr Glu Cys Ser Asp Gly Glu Tyr Ser Tyr
 545 550 555 560
 His Lys Asp Ala Ser Val Cys Thr Lys Cys Pro Asn Asn Ser Trp Ser
 565 570 575
 Asn Gly Asn His Thr Phe Cys Phe Leu Lys Glu Ile Glu Phe Leu Ser
 580 585 590
 Trp Thr Glu Pro Phe Gly Ile Ala Leu Ala Ile Cys Ala Val Leu Gly
 595 600 605
 Val Val Leu Thr Ala Phe Val Met Gly Val Phe Val Arg Phe Arg Asn
 610 615 620
 Thr Pro Ile Val Lys Ala Thr Asn Arg Glu Leu Ser Tyr Val Leu Leu
 625 630 635 640
 Phe Ser Leu Ile Cys Cys Phe Ser Ser Ser Leu Ile Phe Ile Gly Gln
 645 650 655
 Pro Gln Asp Trp Met Cys Arg Leu Arg Gln Pro Ala Phe Gly Ile Ser
 660 665 670

Phe Val Leu Cys Ile Ser Cys Ile Leu Val Lys Thr Asn Arg Val Leu
675 680 685
Leu Val Phe Glu Ala Lys Ile Pro Thr Ser Leu His Arg Lys Trp Trp
690 695 700
Gly Leu Asn Leu Gln Phe Leu Leu Val Phe Leu Cys Thr Phe Val Gln
705 710 715 720
Val Met Ile Cys Val Val Trp Leu Tyr Asn Ala Pro Pro Ser Ser Tyr
725 730 735
Met Asn His Asp Ile Asp Glu Ile Ile Phe Ile Thr Cys Asn Glu Gly
740 745 750
Ser Val Met Ala Leu Gly Phe Leu Ile Gly Tyr Thr Cys Leu Leu Ala
755 760 765
Ala Ile Cys Phe Phe Phe Ala Phe Lys Ser Arg Lys Leu Pro Glu Asn
770 775 780
Phe Thr Glu Ala Lys Phe Ile Thr Phe Ser Met Leu Ile Phe Phe Ile
785 790 795 800
Val Trp Ile Ser Phe Ile Pro Ala Tyr Phe Ser Thr Tyr Gly Lys Phe
805 810 815
Val Ser Ala Val Glu Ala Ile Ala Ile Leu Ala Ser Ser Phe Gly Met
820 825 830
Leu Ala Cys Ile Phe Phe Asn Lys Val Tyr Ile Ile Leu Phe Lys Pro
835 840 845
Ser Arg Asn Thr Ile Glu Glu Val Arg Cys Ser Thr Ala Ala His Ala
850 855 860
Phe Lys Val Ala Ala Lys Ala Thr Leu Lys His Asn Thr Ala Ala Arg
865 870 875 880
Lys Lys Ser Ser Ser Ile Gly Gly Ser Ser Ser Ser Thr Pro Ser Ser
885 890 895
Ser Ile Ser Leu Lys Thr Asn Gly Asn Asp Cys Asp Ala Thr Ser Gly
900 905 910
Lys His Arg Pro Arg Val Ser Phe Gly Ser Gly Thr Val Thr Leu Ser
915 920 925
Leu Ser Phe Glu Glu Ser Arg Arg Ser Ser Leu Met
930 935 940

<210> 108
<211> 1085
<212> PRT
<213> Bos taurus

<400> 108

Met Ala Leu Tyr Ser Cys Cys Trp Ile Leu Leu Ala Phe Ser Thr Trp
1 5 10 15

Cys Thr Ser Ala Tyr Gly Pro Asp Gln Arg Ala Gln Lys Lys Gly Asp
20 25 30

Ile Ile Leu Gly Gly Leu Phe Pro Ile His Phe Gly Val Ala Val Lys
35 40 45

Asp Gln Asp Leu Lys Ser Arg Pro Glu Ser Val Glu Cys Ile Arg Tyr
50 55 60

Asn Phe Arg Gly Phe Arg Trp Leu Gln Ala Met Ile Phe Ala Ile Glu
65 70 75 80

Glu Ile Asn Ser Ser Pro Ala Leu Leu Pro Asn Met Thr Leu Gly Tyr
85 90 95

Arg Ile Phe Asp Thr Cys Asn Thr Val Ser Lys Ala Leu Glu Ala Thr
100 105 110

Leu Ser Phe Val Ala Gln Asn Lys Ile Asp Ser Leu Asn Leu Asp Glu
115 120 125

Phe Cys Asn Cys Ser Glu His Ile Pro Ser Thr Ile Ala Val Val Gly
130 135 140

Ala Thr Gly Ser Gly Ile Ser Thr Ala Val Ala Asn Leu Leu Gly Leu
145 150 155 160

Phe Tyr Ile Pro Gln Val Ser Tyr Ala Ser Ser Ser Arg Leu Leu Ser
165 170 175

Asn Lys Asn Gln Phe Lys Ser Phe Leu Arg Thr Ile Pro Asn Asp Glu
180 185 190

His Gln Ala Thr Ala Met Ala Asp Ile Ile Glu Tyr Phe Arg Trp Asn
195 200 205

Trp Val Gly Thr Ile Ala Ala Asp Asp Asp Tyr Gly Arg Pro Gly Ile
210 215 220

Glu Lys Phe Arg Glu Glu Ala Glu Glu Arg Asp Ile Cys Ile Asp Phe
225 230 235 240

Ser Glu Leu Ile Ser Gln Tyr Ser Asp Glu Glu Lys Ile Gln Gln Val
245 250 255

Val Glu Val Ile Gln Asn Ser Thr Ala Lys Val Ile Val Val Phe Ser
260 265 270

Ser Gly Pro Asp Leu Glu Pro Leu Ile Lys Glu Ile Val Arg Arg Asn
275 280 285

Ile Thr Gly Arg Ile Trp Leu Ala Ser Glu Ala Trp Ala Ser Ser Ser
290 295 300

Leu Ile Ala Met Pro Glu Tyr Phe His Val Val Gly Gly Thr Ile Gly
 305 310 315 320
 Phe Gly Leu Lys Ala Gly Gln Ile Pro Gly Phe Arg Glu Phe Leu Gln
 325 330 335
 Lys Val His Pro Arg Lys Ser Val His Asn Gly Phe Ala Lys Glu Phe
 340 345 350
 Trp Glu Glu Thr Phe Asn Cys His Leu Gln Glu Gly Ala Lys Gly Pro
 355 360 365
 Leu Pro Val Asp Thr Phe Leu Arg Gly His Glu Glu Gly Gly Ala Arg
 370 375 380
 Leu Ser Asn Ser Pro Thr Ala Phe Arg Pro Leu Cys Thr Gly Glu Glu
 385 390 395 400
 Asn Ile Ser Ser Val Glu Thr Pro Tyr Met Asp Tyr Thr His Leu Arg
 405 410 415
 Ile Ser Tyr Asn Val Tyr Leu Ala Val Tyr Ser Ile Ala His Ala Leu
 420 425 430
 Gln Asp Ile Tyr Thr Cys Ile Pro Gly Arg Gly Leu Phe Thr Asn Gly
 435 440 445
 Ser Cys Ala Asp Ile Lys Lys Val Glu Ala Trp Gln Val Leu Lys His
 450 455 460
 Leu Arg His Leu Asn Phe Thr Ser Asn Met Gly Glu Gln Val Thr Phe
 465 470 475 480
 Asp Glu Cys Gly Asp Leu Ala Gly Asn Tyr Ser Ile Ile Asn Trp His
 485 490 495
 Leu Ser Pro Glu Asp Gly Ser Ile Val Phe Lys Glu Val Gly Tyr Tyr
 500 505 510
 Asn Val Tyr Ala Lys Lys Gly Glu Arg Leu Phe Ile Asn Asp Glu Lys
 515 520 525
 Ile Leu Trp Ser Gly Phe Ser Arg Glu Val Pro Phe Ser Asn Cys Ser
 530 535 540
 Arg Asp Cys Leu Ala Gly Thr Arg Lys Gly Ile Ile Glu Gly Glu Pro
 545 550 555 560
 Thr Cys Cys Phe Glu Cys Val Glu Cys Pro Asp Gly Glu Tyr Ser Asp
 565 570 575
 Glu Thr Asp Ala Ser Ala Cys Asp Lys Cys Pro Asp Asp Phe Trp Ser
 580 585 590
 Asn Glu Asn His Thr Ser Cys Ile Ala Lys Glu Ile Glu Phe Leu Ser
 595 600 605

Trp Thr Glu Pro Phe Gly Ile Ala Leu Thr Leu Phe Ala Val Leu Gly
 610 615 620
 Ile Phe Leu Thr Ala Phe Val Leu Gly Val Phe Ile Lys Phe Arg Asn
 625 630 635 640
 Thr Pro Ile Val Lys Ala Thr Asn Arg Glu Leu Ser Tyr Leu Leu Leu
 645 650 655
 Phe Ser Leu Leu Cys Cys Phe Ser Ser Ser Leu Phe Phe Ile Gly Glu
 660 665 670
 Pro Gln Asp Trp Thr Cys Arg Leu Arg Gln Pro Ala Phe Gly Ile Ser
 675 680 685
 Phe Val Leu Cys Ile Ser Cys Ile Leu Val Lys Thr Asn Arg Val Leu
 690 695 700
 Leu Val Phe Glu Ala Lys Ile Pro Thr Ser Phe His Arg Lys Trp Trp
 705 710 715 720
 Gly Leu Asn Leu Gln Phe Leu Leu Val Phe Leu Cys Thr Phe Met Gln
 725 730 735
 Ile Val Ile Cys Ala Ile Trp Leu Asn Thr Ala Pro Pro Ser Ser Tyr
 740 745 750
 Arg Asn His Glu Leu Glu Asp Glu Ile Ile Phe Ile Thr Cys His Glu
 755 760 765
 Gly Ser Leu Met Ala Leu Gly Phe Leu Ile Gly Tyr Thr Cys Leu Leu
 770 775 780
 Ala Ala Ile Cys Phe Phe Phe Ala Phe Lys Ser Arg Lys Leu Pro Glu
 785 790 795 800
 Asn Phe Asn Glu Ala Lys Phe Ile Thr Phe Ser Met Leu Ile Phe Phe
 805 810 815
 Ile Val Trp Ile Ser Phe Ile Pro Ala Tyr Ala Ser Thr Tyr Gly Lys
 820 825 830
 Phe Val Ser Ala Val Glu Val Ile Ala Ile Leu Ala Ala Ser Phe Gly
 835 840 845
 Leu Leu Ala Cys Ile Phe Phe Asn Lys Val Tyr Ile Ile Leu Phe Lys
 850 855 860
 Pro Ser Arg Asn Thr Ile Glu Glu Val Arg Cys Ser Thr Ala Ala His
 865 870 875 880
 Ala Phe Lys Val Ala Ala Arg Ala Thr Leu Arg Arg Ser Asn Val Ser
 885 890 895
 Arg Gln Arg Ser Ser Ser Leu Gly Gly Ser Thr Gly Ser Thr Pro Ser
 900 905 910

Ser Ser Ile Ser Ser Lys Ser Asn Ser Glu Asp Pro Phe Pro Gln Gln
 915 920 925
 Gln Pro Lys Arg Gln Lys Gln Pro Gln Pro Leu Ala Leu Ser Pro His
 930 935 940
 Asn Ala Gln Gln Pro Gln Pro Arg Pro Pro Ser Thr Pro Gln Pro Gln
 945 950 955 960
 Pro Gln Ser Gln Gln Pro Pro Arg Cys Lys Gln Lys Val Ile Phe Gly
 965 970 975
 Ser Gly Thr Val Thr Phe Ser Leu Ser Phe Asp Glu Pro Gln Lys Thr
 980 985 990
 Ala Val Ala His Arg Asn Ser Thr His Gln Thr Ser Leu Glu Ala Gln
 995 1000 1005
 Lys Asn Asn Asp Ala Leu Thr Lys His Gln Ala Leu Leu Pro Leu Gln
 1010 1015 1020
 Cys Gly Glu Thr Asp Ser Glu Leu Thr Ser Gln Glu Thr Gly Leu Gln
 1025 1030 1035 1040
 Gly Pro Val Gly Glu Asp His Gln Leu Glu Met Glu Asp Pro Glu Glu
 1045 1050 1055
 Met Ser Pro Ala Leu Val Val Ser Asn Ser Arg Ser Phe Val Ile Ser
 1060 1065 1070
 Gly Gly Gly Ser Thr Val Thr Glu Asn Met Leu Arg Ser
 1075 1080 1085
 <210> 109
 <211> 229
 <212> PRT
 <213> Homo sapiens
 <400> 109
 Met Gly Trp Arg Arg Arg Thr Arg Gly Ala Glu Glu Leu Thr Phe Gly
 1 5 10 15
 Gln Val Trp Gly His Ser Pro Arg Ser Thr Val Arg Glu Leu Ser Val
 20 25 30
 Pro Cys Val Leu Met Ser Thr Asp Ile Asn Glu Gln Arg Asn Gly Met
 35 40 45
 Asp Gln Gln Glu Asp Arg Gln Pro Arg Glu Met Ala Ser Gly Thr Ala
 50 55 60
 Gly Ser Arg Lys Ile Asn Cys Thr Gly Ile Tyr Leu Val His Leu Ala
 65 70 75 80
 Val Ser Asp Leu Leu Phe Thr Val Ala Leu Pro Gly Arg Val Leu Ala
 85 90 95

Phe Arg Gln Gly Ala Leu Gln Ala Asp Gly Val Cys Ala Leu His Arg
 100 105 110
 His Leu Arg Gly Val Tyr Leu Met Ala Cys Val Ser Val Asp His Tyr
 115 120 125
 Pro Ala Val Val Cys Ala His Trp Gly Pro Arg Leu Arg Thr Ala Gly
 130 135 140
 Arg Ala Arg Leu Val Cys Val Ala Ile Trp Thr Leu Val Leu Leu Gln
 145 150 155 160
 Thr Met Pro Leu Leu Leu Met Pro Met Thr Lys Pro Leu Val Gly Lys
 165 170 175
 Leu Ala Cys Met Glu Tyr Ser Ser Met Glu Ser Val Leu Gly Leu Pro
 180 185 190
 Leu Met Val Leu Val Ala Phe Ala Ile Gly Phe Cys Gly Pro Val Gly
 195 200 205
 Ile Ile Leu Ser Cys Tyr Met Lys Ile Thr Trp Lys Leu Cys Ser Thr
 210 215 220
 Ala Gly Arg Thr Gln
 225

<210> 110
 <211> 361
 <212> PRT
 <213> Homo sapiens

<400> 110
 Met Asp Ile Gln Met Ala Asn Asn Phe Thr Pro Pro Ser Ala Thr Pro
 1 5 10 15
 Gln Gly Asn Asp Cys Asp Leu Tyr Ala His His Ser Thr Ala Arg Ile
 20 25 30
 Val Met Pro Leu His Tyr Ser Leu Val Phe Ile Ile Gly Leu Val Gly
 35 40 45
 Asn Leu Leu Ala Leu Val Val Ile Val Gln Asn Arg Lys Lys Ile Asn
 50 55 60
 Ser Thr Thr Leu Tyr Ser Thr Asn Leu Val Ile Ser Asp Ile Leu Phe
 65 70 75 80
 Thr Thr Ala Leu Pro Thr Arg Ile Ala Tyr Tyr Ala Met Gly Phe Asp
 85 90 95
 Trp Arg Ile Gly Asp Ala Leu Cys Arg Ile Thr Ala Leu Val Phe Tyr
 100 105 110
 Ile Asn Thr Tyr Ala Gly Val Asn Phe Met Thr Cys Leu Ser Ile Asp
 115 120 125

Arg Phe Ile Ala Val Val His Pro Leu Arg Tyr Asn Lys Ile Lys Arg
 130 135 140
 Ile Glu His Ala Lys Gly Val Cys Ile Phe Val Trp Ile Leu Val Phe
 145 150 155 160
 Ala Gln Thr Leu Pro Leu Leu Ile Asn Pro Met Ser Lys Gln Glu Ala
 165 170 175
 Glu Arg Ile Thr Cys Met Glu Tyr Pro Asn Phe Glu Glu Thr Lys Ser
 180 185 190
 Leu Pro Trp Ile Leu Leu Gly Ala Cys Phe Ile Gly Tyr Val Leu Pro
 195 200 205
 Leu Ile Ile Ile Leu Ile Cys Tyr Ser Gln Ile Cys Cys Lys Leu Phe
 210 215 220
 Arg Thr Ala Lys Gln Asn Pro Leu Thr Glu Lys Ser Gly Val Asn Lys
 225 230 235 240
 Lys Ala Leu Asn Thr Ile Ile Leu Ile Ile Val Val Phe Val Leu Cys
 245 250 255
 Phe Thr Pro Tyr His Val Ala Ile Ile Gln His Met Ile Lys Lys Leu
 260 265 270
 Arg Phe Ser Asn Phe Leu Glu Cys Ser Gln Arg His Ser Phe Gln Ile
 275 280 285
 Ser Leu His Phe Thr Val Cys Leu Met Asn Phe Asn Cys Cys Met Asp
 290 295 300
 Pro Phe Ile Tyr Phe Phe Ala Cys Lys Gly Tyr Lys Arg Lys Val Met
 305 310 315 320
 Arg Met Leu Lys Arg Gln Val Ser Val Ser Ile Ser Ser Ala Val Lys
 325 330 335
 Ser Ala Pro Glu Glu Asn Ser Arg Glu Met Thr Glu Thr Gln Met Met
 340 345 350
 Ile His Ser Lys Ser Ser Asn Gly Lys
 355 360

<210> 111
 <211> 367
 <212> PRT
 <213> Homo sapiens

<400> 111
 Met Ser Lys Arg Ser Trp Trp Ala Gly Ser Arg Lys Pro Pro Arg Glu
 1 5 10 15
 Met Leu Lys Leu Ser Gly Ser Asp Ser Ser Gln Ser Met Asn Gly Leu
 20 25 30

Glu Val Ala Pro Pro Gly Leu Ile Thr Asn Phe Ser Leu Ala Thr Ala
 35 40 45
 Glu Gln Cys Gly Gln Glu Thr Pro Leu Glu Asn Met Leu Phe Ala Ser
 50 55 60
 Phe Tyr Leu Leu Asp Phe Ile Leu Ala Leu Val Gly Asn Thr Leu Ala
 65 70 75 80
 Leu Trp Leu Phe Ile Arg Asp His Lys Ser Gly Thr Pro Ala Asn Val
 85 90 95
 Phe Leu Met His Leu Ala Val Ala Asp Leu Ser Cys Val Leu Val Leu
 100 105 110
 Pro Thr Arg Leu Val Tyr His Phe Ser Gly Asn His Trp Pro Phe Gly
 115 120 125
 Glu Ile Ala Cys Arg Leu Thr Gly Phe Leu Phe Tyr Leu Asn Met Tyr
 130 135 140
 Ala Ser Ile Tyr Phe Leu Thr Cys Ile Ser Ala Asp Arg Phe Leu Ala
 145 150 155 160
 Ile Val His Pro Val Lys Ser Leu Lys Leu Arg Arg Pro Leu Tyr Ala
 165 170 175
 His Leu Ala Cys Ala Phe Leu Trp Val Val Val Ala Val Ala Met Ala
 180 185 190
 Pro Leu Leu Val Ser Pro Gln Thr Val Gln Thr Asn His Thr Val Val
 195 200 205
 Cys Leu Gln Leu Tyr Arg Glu Lys Ala Ser His His Ala Leu Val Ser
 210 215 220
 Leu Ala Val Ala Phe Thr Phe Pro Phe Ile Thr Thr Val Thr Cys Tyr
 225 230 235 240
 Leu Leu Ile Ile Arg Ser Leu Arg Gln Gly Leu Arg Val Glu Lys Arg
 245 250 255
 Leu Lys Thr Lys Ala Val Arg Met Ile Ala Ile Val Leu Ala Ile Phe
 260 265 270
 Leu Val Cys Phe Val Pro Tyr His Val Asn Arg Ser Val Tyr Val Leu
 275 280 285
 His Tyr Arg Ser His Gly Ala Ser Cys Ala Thr Gln Arg Ile Leu Ala
 290 295 300
 Leu Ala Asn Arg Ile Thr Ser Cys Leu Thr Ser Leu Asn Gly Ala Leu
 305 310 315 320
 Asp Pro Ile Met Tyr Phe Phe Val Ala Glu Lys Phe Arg His Ala Leu
 325 330 335

Cys Asn Leu Leu Cys Gly Lys Arg Leu Lys Gly Pro Pro Pro Ser Phe
340 345 350

Glu Gly Lys Thr Asn Glu Ser Ser Leu Ser Ala Lys Ser Glu Leu
355 360 365

<210> 112

<211> 339

<212> PRT

<213> Homo sapiens

<400> 112

Met Asn Gly Leu Glu Val Ala Pro Pro Gly Leu Ile Thr Asn Phe Ser
1 5 10 15

Leu Ala Thr Ala Glu Gln Cys Gly Gln Glu Thr Pro Leu Glu Asn Met
20 25 30

Leu Phe Ala Ser Phe Tyr Leu Leu Asp Phe Ile Leu Ala Leu Val Gly
35 40 45

Asn Thr Leu Ala Leu Trp Leu Phe Ile Arg Asp His Lys Ser Gly Thr
50 55 60

Pro Ala Asn Val Phe Leu Met His Leu Ala Val Ala Asp Leu Ser Cys
65 70 75 80

Val Leu Val Leu Pro Thr Arg Leu Val Tyr His Phe Ser Gly Asn His
85 90 95

Trp Pro Phe Gly Glu Ile Ala Cys Arg Leu Thr Gly Phe Leu Phe Tyr
100 105 110

Leu Asn Met Tyr Ala Ser Ile Tyr Phe Leu Thr Cys Ile Ser Ala Asp
115 120 125

Arg Phe Leu Ala Ile Val His Pro Val Lys Ser Leu Lys Leu Arg Arg
130 135 140

Pro Leu Tyr Ala His Leu Ala Cys Ala Phe Leu Trp Val Val Val Ala
145 150 155 160

Val Ala Met Ala Pro Leu Leu Val Ser Pro Gln Thr Val Gln Thr Asn
165 170 175

His Thr Val Val Cys Leu Gln Leu Tyr Arg Glu Lys Ala Ser His His
180 185 190

Ala Leu Val Ser Leu Ala Val Ala Phe Thr Phe Pro Phe Ile Thr Thr
195 200 205

Val Thr Cys Tyr Leu Leu Ile Ile Arg Ser Leu Arg Gln Gly Leu Arg
210 215 220

Val Glu Lys Arg Leu Lys Thr Lys Ala Val Arg Met Ile Ala Ile Val
225 230 235 240

Thr Phe Pro Phe Ile Thr Thr Val Thr Cys Tyr Leu Leu Ile Ile Arg
 165 170 175
 Ser Leu Arg Gln Gly Leu Arg Val Glu Lys Arg Leu Lys Thr Lys Ala
 180 185 190
 Val Arg Met Ile Ala Ile Val Leu Ala Ile Phe Leu Val Cys Phe Val
 195 200 205
 Pro Tyr His Val Asn Arg Ser Val Tyr Val Leu His Tyr Arg Ser His
 210 215 220
 Gly Ala Ser Cys Ala Thr Gln Arg Ile Leu Ala Leu Ala Asn Arg Ile
 225 230 235 240
 Thr Ser Cys Leu Thr Ser Leu Asn Gly Ala Leu Asp Pro Ile Met Tyr
 245 250 255
 Phe Phe Val Ala Glu Lys Phe Arg His Ala Leu Cys Asn Leu Leu Cys
 260 265 270
 Gly Lys Arg Leu Lys Gly Pro Pro Pro Ser Phe Glu Gly Lys Thr Asn
 275 280 285
 Glu Ser Ser Leu Ser Ala Lys Ser Glu Leu
 290 295

<210> 114

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artifical Sequence: Primer/Probe

<400> 114

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22

<210> 115

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artifical Sequence: Primer/Probe

<400> 115

aatgtcatgc tctagagtga ggcaga

26

<210> 116

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artifical Sequence: Primer/Probe

<400> 116
 acatggagat aaagaactac agcagca 27

 <210> 117
 <211> 27
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artifical Sequence: Primer/Probe

 <400> 117
 tgttcctttt accggtaaatt tctgtcc 27

 <210> 118
 <211> 22
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 <223> Description of Artifical Sequence: Primer/Probe

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 gcccttttaga taagtcgtcc aa 22

 <210> 119
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 <212> DNA
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 <220>
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 <210> 120
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 <223> Description of Artifical Sequence: Primer/Probe

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 <210> 121
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 <400> 121

ccattattgg aactggcatg ta 22

<210> 122
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 <212> DNA
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<400> 122
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<210> 123
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 atacagagtg ctccaccact ga 22

<210> 124
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 <212> DNA
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<400> 124
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<210> 125
 <211> 26
 <212> DNA
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<220>
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<400> 125
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<210> 126
 <211> 22
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<220>
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<400> 126
 gggagtttag gctgactcca ta 22

<210> 127
 <211> 22
 <212> DNA
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 <210> 128
 <211> 26
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 <220>
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 <210> 129
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 <400> 129
 gtctgtagct gccaacatag ct 22

 <210> 130
 <211> 22
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 <220>
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 <400> 130
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 <210> 131
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 <400> 131
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 <210> 132
 <211> 22

<212> DNA
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 <223> Description of Artifical Sequence: Primer/Probe

 <400> 132
 gatggcaata aaacgggcat ag 22

 <210> 133
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 <400> 133
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 <210> 134
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 <210> 135
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 <400> 135
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 <210> 136
 <211> 22
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 <400> 136
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 <210> 137
 <211> 30
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<220>
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 <400> 137
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 <210> 138
 <211> 22
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 <400> 138
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 <210> 139
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 <400> 139
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 <210> 140
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 <400> 140
 ccacctgctc atctcaccta atagttg 27

 <210> 141
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 <400> 141
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 <210> 142
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<400> 142

agcttgagga gactgtcctt tt

22

<210> 143

<211> 26

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<400> 144

cagctttagc agtgaaggaa tg

22

<210> 145

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Description of Artifical Sequence: Primer/Probe

<400> 145

agctcaccta actggagtga ca

22

<210> 146

<211> 26

<212> DNA

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<223> Description of Artifical Sequence: Primer/Probe

<400> 146

tcatgggaca atcctcttca tgtatg

26

<210> 147

<211> 22

<212> DNA

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<223> Description of Artifical Sequence: Primer/Probe

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<210> 148
 <211> 22
 <212> DNA
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<220>
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<400> 148
 cacctccatt cccctatgta ct 22

<210> 149
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<220>
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<400> 149
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<210> 150
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<400> 150
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<210> 151
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 <212> DNA
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<220>
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<400> 151
 ctatggcaca gccaatatga ct 22

<210> 152
 <211> 26
 <212> DNA
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<220>
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<400> 152
 aacccaaatc tggctactca cccgaa 26

<210> 153
 <211> 22
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 <400> 153
 ccaatgagat cagtttcttg gt 22

 <210> 154
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 <400> 154
 gggcatcttc tggttcaata tc 22

 <210> 155
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 <400> 155
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 <210> 156
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 <400> 156
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 <210> 157
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 <210> 158

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 <400> 158
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 <400> 159
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 <210> 160
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 <210> 161
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 <400> 161
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 <210> 162
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 <400> 162
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 <210> 163
 <211> 22
 <212> DNA

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<223> Description of Artifical Sequence: Primer/Probe

<400> 163

gtctttctgt gcctctcaca tc

22

<210> 164

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artifical Sequence: Primer/Probe

<400> 164

ttttctgtga caccagcct gtg

23

<210> 165

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Description of Artifical Sequence: Primer/Probe

<400> 165

tgtcagagca ggagagcttt ag

22

<210> 166

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Description of Artifical Sequence: Primer/Probe

<400> 166

gtctttctgt gcctctcaca tc

22

<210> 167

<211> 23

<212> DNA

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<223> Description of Artifical Sequence: Primer/Probe

<400> 167

ttttctgtga caccagcct gtg

23

<210> 168

<211> 22

<212> DNA

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 <210> 169
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 <210> 170
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 <400> 170
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 <210> 171
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 <400> 171
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 <210> 172
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 <400> 172
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 <210> 173
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<400> 173
caactgcaca ggcatctacc tgggtg

25

<210> 174
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artifical Sequence: Primer/Probe

<400> 174
gtgaacagca ggtcagacac a

21